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Practice in Preschool Education

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Practice in Preschool Education

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Preface

THE light of cold scrutiny might well incite question concerning the employment of the term "practice in preschool education" to entitle a discussion of the philosophy and procedures of a single school. It might even awake a suspicion that the authors are complacent in the conviction that "practice makes perfect." Let their belief be stated without more ado, therefore, that the truth of this adage is no more justified than an implication that practice *is* perfect at the Iowa Preschool Laboratories.

The following chapters have, however, been fostered by the belief that any social institution dedicated to the training of individuals must recognize the fact of its influence upon these individuals and at the same time undertake the responsibility of self-analysis. The statement of definite, coherent, and appropriate objectives, the consistency of provisions with these objectives, the application of diagnostic checks whenever possible may be means of assuring a realistic point of view. Whether a consistent, wholesome, or desirable philosophy is reflected in these pages will be a matter of opinion, but at least there has been a sincere attempt to be articulate concerning the present theory and practice of one institution engaged in nursery-school education.

It is always to be hoped that the process of formulating and expressing an educational approach will not mean a subsequent solidification. The philosophy of the preschool laboratories supports a belief in being experimentally minded, as to both the course and the content of the curriculum. Open-mindedness need not be synonymous with flaccidity, waywardness, or lack of purpose, however, and objective scrutiny as well as subjective evaluation are valuable allies.

To think first of the needs of the child and then to provide environmentally for these needs is the sequence and *modus operandi* of our curriculum construction. In one sense it may be said that the child is thought of generically, as representing a type of individual whose growth patterns lie within certain limits. In another sense, the school must consider each child as an individual and study not only his similarities to other children but his differences from others of his kind. And the study is only the preliminary step, the means toward the end of adjusting stimulation intelligently.

This stimulation should be in line with a fundamental philosophy concerning the nature of the ultimate objective, that is, the mature individual. Fortunately, perhaps, chance and factors beyond our control at present relieve us from the need of disclaiming a common pattern or universal mold. The answer lies in an attempt to develop the peculiar or particular capacities of each individual. Nevertheless, at a time when the influence of the environment seems to be increasingly apparent there are indications that we have left more to chance than has, perhaps, been realized.

What, then, is our aim for the child? Inasmuch as we cannot entirely anticipate the specific demands to be made upon him by the society in which he will move as an adult, the best solution would seem to be to foster in him those attitudes, habits, and skills which should enable him to meet the problems of living effectively and with satisfaction to himself and others. Nor is education to be thought of entirely in terms of preparation. Living is done day by day.

Many contributions to this book have been made by others than its authors. Some have come indirectly. The children in the Preschool Laboratories have freely and unconsciously contributed to the education of the staff. The stimulation of friendly controversy has been a welcomed encouragement.

There are certain direct and specific aids, however, for which the authors wish to express their appreciation. To Dr. George D. Stoddard, director of the Iowa Child Welfare

Research Station, they owe sincere thanks not only for his steady interest and encouragement but for his concrete help in reading the manuscript. Miss Eleanor Lack, present head teacher of Third Group, has also contributed generously through valuable suggestions as well as through certain illustrative material in Chapter X. The editorial judgment and practical aid of Miss Dorothy E. Bradbury have been almost indispensable.

Frederick Kent is responsible for most of the photographs, and to his patience and insight may be attributed the fidelity with which these scenes in the Preschool Laboratories appear. Finally, to three members of the School of Education are due the authors' grateful acknowledgments. The interest of Miss Maude McBroom, Principal of the University Elementary School, made possible the inclusion of part of the social-science material organized for the Junior Primary under her direction. The discussion of the program of music education in Junior Primary, written by Miss Anne E. Pierce, Assistant Professor of Music, and that concerning the art program in the same group, prepared by Miss Edna E. Patzig, Associate Professor of Art, have augmented a description of the five-year-olds' activities which would otherwise have been incomplete.

RUTH UPDEGRAFF.

IOWA CITY, IOWA,
July, 1938.

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Editor's Introduction

NOT many years ago the very words *preschool education* would have seemed a contradiction in terms; today they reflect a familiar concept of the expanded scope and meaning of education. The old education was thought to be limited largely to school training; its theory was saturated throughout with the fallacy that instruments, devices, and procedures constituted the heart of true learning. The new education is regarded as something that is carried on wherever and whenever human behavior needs to be modified; its theory is based upon the assumption that school-like machinery must always be subordinate to the goal of changing human ways.

It was characteristic of the older view in education that teachers were sometimes spoken of as substitutes for parents and clergymen. Thus arose the familiar *cliché* that the school was taking over functions that had previously been exercised by the home and the church. This attitude, again, reflected a fundamental conception of education as mere schooling, a pattern of endeavor which was enlarged or diminished only with a corresponding change in the machinery of formal instruction.

Nowhere is the newer view in this regard better expressed than in the field of modern preschool education. Working on an educational level that has not yet been much burdened with the weight of traditional practice, dealing with children so young that few customary curricula have been devised for them, and operating relatively unhampered by restrictions which old habit has imposed on institutions popularly reputed to give "real" culture, the workers in the field of preschool education have had a free field in which to devise and operate a truly goal-conscious educational agency. Not looking upon

the school as a substitute for the home or upon either of these agencies as a substitute for any other behavior-changing instrument, the preschool workers have instead looked upon the child, have envisaged the personality they would have him become, and have then called upon all institutions of good will and purpose to work together in developing that personality.

The present book shows how this theory operates in preschool education. It gives this picture, not in a formal treatise on preschool methods, not in an academic statement of principles, not in a list of devices, not in a catalogue of equipment and materials, but in a wealth of detailed narrative-descriptions of children's activities. This does not mean that principles, methods, devices, equipment, and materials are ignored, but rather that they are treated as integral factors in the whole complex of situations which go to make up the modern nursery school.

What might appear at first glance to be a weakness in this book is in fact its chief virtue. Superficially it is a book about the preschool laboratories at the University of Iowa, but actually it is a textbook in nursery-school practice employing a new method of presentation—a method which requires a description of cases in a natural setting. The hope and the justification of this method can be realized only when the reader of the book is enabled thereby more readily to attack his own problems from the ground up because the supporting principles and practices were presented to him from the ground up. The authors of *Practice in Preschool Education* have succeeded admirably in giving this kind of service to the students in their field.

HAROLD BENJAMIN.

UNIVERSITY OF COLORADO,
August, 1938.

Practice in Preschool Education

Introduction

There are four preschool laboratories at the University of Iowa. These enroll approximately one hundred children in five groups as follows: First Group is composed of eighteen two-year-olds, Second Group of twenty-two three-year-olds, and Third Group of twenty-four four-year-olds, and two sections of Junior Primary comprise between thirty-five and forty five-year-olds. The laboratory for five-year-olds is sponsored jointly by the College of Education and the Iowa Child Welfare Research Station and is housed in the same building as the University elementary school. In all the groups the children in attendance are, for the most part, from homes in the higher occupational categories. The fees are nominal, ten dollars a semester for tuition plus a food fee based on food costs.

All groups have half-day sessions. First Group, Second Group, and one Junior Primary group meet from 9:00 until 11:45 A.M. Third Group meets from 1:00 until 5:00 P.M. and a second Junior Primary group from 1:00 until 3:30 P.M. Second and Third Groups use the same building; First Group has a building of its own.

There are eating and sleeping groups, however. Twenty children may be given the noon meal in the dining room of the building occupied by Second and Third Groups. These children may be in attendance at any of the four laboratories and, in that they remain during the noon hour, their school days are increased that much in length. Third Group children nap during their time in school.

The preschool laboratories, a part of the Iowa Child Welfare Research Station, were founded seventeen years ago in order

Practice in Preschool Education

When the two-year-old child enters preschool, he is not expected to take responsibility for his toilet needs. A child who has been accustomed to doing so at home, however, usually takes this responsibility at school. In speaking of the toilet to each child, the teacher at first mentions the terminology which the child has known at home but at the same time mentions the expression of "going to the toilet." During the early weeks the teacher assumes much of the responsibility in seeing that the child gets to the toilet and in helping him with his clothing. Later he is encouraged to assume more responsibility for himself, although usually a teacher is present in the bathroom when children are using it.

In the three-year-old group it is assumed that the children will be somewhat more independent than the two-year-olds. They are expected to take some responsibility for indicating their toilet needs as well as for using the toilet without accident to clothing or floor. In general, the three-year-olds have to be reminded to flush the toilet after use. The children are still rather closely supervised during the bathroom routine.

The children in the two younger groups are required to have a complete set of extra clothing available. Soiled clothes are rinsed and sent home with the child.

Children in Third Group are supervised closely at the beginning of the year, but this supervision tends to decrease as the children become increasingly dependable. However, there may always be one or two children who need more guidance than others. The teacher looks into the toilet rooms occasionally to see that all goes smoothly during the routines. It is the understanding that each child in Third Group will be responsible for going to the toilet when he needs to, although the teacher is alert in order to remind the child if he seems to be neglecting his needs. It does not seem necessary for four-year-olds to have a change of clothing at school.

In Junior Primary the toilet situation is quite different from that in other groups. The toilets used by these children are also used by the first and second grades, and boys and girls do not use the same toilet room.

I

A Day in the Preschool Laboratories

To convey a general idea of children's activities in the preschool laboratories, the following descriptions have been drawn from the notes of an actual observer who stayed one day in each group.

These are minute-to-minute reports of activities such as might be observed on almost any day. The activities of the children are in relief. However, in the background may be seen something of what the nursery school provides in equipment and guidance for the child's development. Fitted together, these convey a general impression of the organization and program of the four groups.

A Day in First Group (*For two-year-olds*)[1]

About a quarter to nine the children begin to arrive. Since the day is cold and snowy, they do not stop outside for the usual half-hour or forty-five minutes. Instead they go at once into the cloakroom, where Miss Keister is supervising the removal of wraps. Margaret, Billy, and John, like most of the other children, are able to help to the extent of pulling off their own caps and mittens and hanging up their snow suits and sweaters on the large-pronged hooks. Edward, who is just two, gives no help at all. Mary and Julia, however, complete the entire undressing process with no assistance whatever.

[1] March 8, 1935.

One by one, the children go into the playroom, where they are free to choose whatever they wish to do. At the end of the room, Miss Fales has arranged long, flexible boards as two inclines. Henry and Billy run up and down these or stand on them, springing gently and watching what the others are doing. Margaret chooses one of the rubber baby dolls which she bundles up in "covers" from the chest of doll clothes, tucks into a baby carriage, and wheels around the room.

There are now two teachers in the room. Miss Lancaster supervises only the inclines, at times warning the children against pushing or shoving and making sure that the boards are always secure. Miss Fales supervises the play of the rest of the children in the playroom.

Billy climbs the steps up to the balcony, leans his chin against the railing, and looks quietly down on the others for a few seconds. Then he goes down the stairs, finds some buckets and spoons in a box, and climbs into a long, shallow table beside the window where he plays alone, looking out of the window or watching the other children. Some are still attracted by the inclined boards—laughing and shouting, singing and chanting as they run, or roll, or bounce on them.

Julia takes an armful of doll clothes into the bathroom to wash at a low basin and to hang up on low hooks. Next she washes a set of tin doll dishes and later gives one of the rubber dolls a bath. Jack fastens a train of five interlocking cars together and pushes it out into the hallway, singing, "Ding-dong, ding-dong."

Catherine and Henry, who have grown tired of the inclined boards and who have been chasing each other excitedly for a few moments, and Jean, who has been unoccupied, spy a large zinc tub of water which has just been placed on an oilcloth on the floor of the playroom, with a number of water toys afloat in it—a steamboat, houseboat, tugboat and barge, lighthouse, and buoy. They run over, kneel down beside it, and with squeals of delight begin to push the boats about in the water. Miss Fales, supervising this play, rolls their sleeves up and provides the children, four at a time, with oilcloth

aprons. Occasionally she warns a child against splashing himself or the other children and sees that each always has a toy. If others want to play, they are told that they may have a turn soon, but that they may watch now. Henry, who is playing with the boats, begins to chant—and Barbara soon takes it up—"Water! Water! I want some water! Water! Water!" Miss Lancaster brings out some books containing pictures of boats and a lighthouse for several of the children to see. Ann leaves the group at water play to climb up on the piano stool. She presses the keys softly, using four fingers on each hand and listening attentively to the sounds she makes.

Meanwhile, some of the children have gone to the tables, where they have seen crayons and clay. Those who choose crayons have half sheets of unprinted newspaper and a box of crayons. Some make fine strokes, somewhat like writing, and cover only a small part of the sheet. A few cover the entire sheet with dots. Others handle the crayon as a brush, making large, free movements back and forth. Jane covers the entire page with one color—yellow.

The children who are going to play with clay are given oilcloth aprons and balls of clay which are about four inches in diameter. Mary pats her ball, pinches it, rolls it out, and says at length, "I made a birthday cake." Immediately several of the other children say, "Mine's a birthday cake, too." "I'm making a birthday cake, now." Later Mary says she has made a pie and some pancakes; at once three or four of the other children are pounding and patting "pies" and "pancakes." Unaware of the others, Billy molds the clay into a ball and makes holes in it with his finger. Beverly carefully pats into shape four thin oblong pieces and puts them together as walls of a house. Then she puts a roof on and asks the teacher how to make a chimney. All in all, the clay seems more interesting to the children than the crayons and paper, occupying some of them for almost half an hour.

While some children use clay and some color with crayons, a group of three is busily occupied making a house of blocks. The house is round, being made of the quarter circles with

cylinders placed on top. When it is finished, Julia puts some of the small rubber dolls into it.

Billy and Edward wander over to the cage and watch the guinea pigs. Miss Fales brings milk and bread and the children crumble up the bread and put it and the milk into the pans for the guinea pigs. Miss Keister goes to three children who are not so busily occupied as some of the others and says to them, "Would you like to come for stories now?" The children run immediately into the small room and settle themselves on the three small chairs placed there.

As each group of children comes from stories, they are taken in to go to the toilet and to wash before lunch. When they return to the playroom, the teacher suggests that one or two may arrange the cups on the lunch tables, where she has already placed paper napkins. Those who are not carrying cups play quietly with blocks and dolls until all the children are washed. At ten o'clock they sit down to their midmorning lunch. One teacher gives each child a teaspoon of cod-liver oil. A second passes tomato juice in a small green pitcher. Henry, Mary, Julia, and Billy are able to pour their own tomato juice without assistance. The other children are encouraged to pour theirs, too, but the teacher helps by steadying the pitcher as each child fills his cup.

While lunch is being served, a teacher sets up small canvas cots and covers each with each child's individual rug. Having finished and removed his used cup to a side table, each child goes over to his own bed and lies down. The children are covered with light blankets. Although a few whisper to themselves as they play with their hands or the edging of the blanket, most of them rest quietly. When Billy waves his legs and kicks his heels, a teacher goes over to tuck the cover about him again and sits beside him for a short time. Toward the end of the rest period, quiet, sustained music is played on the victrola. After fifteen minutes, the teachers fold the blankets and give each child his own to put on the bench at one side of the room. Then beds are put away and tables pushed back to make ample space.

Miss Lancaster sits down at the piano and several of the children gather around. She plays and sings *Snowflakes Falling* When she has finished, Barbara says, "Again." This time Jane and Billy sing also. "Now let's sing the *Nut Tree,*" suggests Beatrice. Miss Lancaster and some of the children sing this. Mary and Edward merely listen with interest. Other songs are sung. "Now *Jingle Bells,*" begs Jane. Miss Lancaster plays *Jingle Bells* and the children take wrist bells from a basket which is near the piano and prance about keeping fairly good time to the music. After *Jingle Bells,* Miss Lancaster plays two other rhythmic pieces, one a march. The children respond in several ways to each piece but for the most part they keep fairly good time. The singing and rhythmic activity lasts for twenty minutes but during this time some of the children leave and others, who have been occupied at looking at pictures and playing with trains, join the group.

After they have left the music group, John, Barbara, Jane, and Margaret play in the doll corner. Margaret lies down in the doll bed, her feet and legs sticking far out over the end, and the others set to work to cover her up. From the doll chest they bring armfuls of "covers" and pile them on her, one on top of the other. It is evident that they are playing she is the baby, though no word about that is spoken. Edward fills a baby carriage with blocks, covers it with a large square of cloth, and pushes it about the room. When it tips over accidentally, he sits down and begins to spin the wheels around.

Billy and Mary spread out doll dishes on the floor and sit down to imaginary tea. When Jack sees what they are doing he runs over, grabs the teapot and a cup, and pours tea for himself. The other two resent this intrusion and would forcibly banish Jack, if the teacher did not intercede for him, explaining to the others that there are cups enough for all. So the three sit down and silently pour and drink one imaginary cup of tea after another as fast as each can get hold of the teapot.

The other children occupy themselves with pushing trains or trucks around the room until it is their turn to have their wraps put on. They play outdoors for the last twenty minutes or half-hour of the morning.

Although the snow is deep, the large wooden platform at the back has been shoveled clear. The children ride tricycles or kiddie cars, play on the rocking boat, pull the wagon about, and play with larger blocks or boxes or other equipment encouraging activity. Had there been no snow on the ground, the children could have played in the sandbox with buckets, spoons, and scoops, used the climbing apparatus, the climbing sawhorse, and the packing boxes and ladders. If the day had been warm, they might have carried through out of doors almost any activity which took place inside.

Margaret shovels snow from one spot to another with a short-handled shovel. Billy pulls John about on the sled and Edward sits on the other sled and slides down the runway from the platform. Jane walks about in snow up to her ankles, exploring remote corners of the yard. Then she climbs into the garden swing and, as she watches the other children, sways the creaking swing slowly back and forth.

When the teachers begin to clear more snow and ice from the platform, four of the children help, one shoveling and the other three sweeping with small brooms. Mary and Edward, on the rocking boat, sing and hum to themselves. Ann runs across the play yard and makes a series of tracks where telephone wires cast shadows on the snow. Then she tumbles into the snow laughingly and several of the other children fall and roll in the snow.

Edward tries to take Margaret's shovel away from her. Margaret shouts, "No!" and gives Edward a push which sends him into a snowdrift. Edward begins to cry and the teacher comes over to say, "Be more careful, Margaret. You hurt Edward when you push him down. Tell him you are using the shovel." She helps Edward up and brushes him off, saying, "That was Margaret's shovel, Edward. She had it first. She was using it. Come with me and we will find a shovel for you."

The parents begin to call for the children at eleven-thirty Jack's mother unbolts the gate from the outside, and after he passes through Jack rebolts it himself. Margaret shouts, "No! No! Don't want to go," when the taxi arrives for her. The teacher says, quietly, "Good-by, Margaret. Why don't you put your broom over by the steps as you go?" Margaret cheerfully carries her broom over and sets it on the bottom step before she calls good-by. Henry, the last to leave, runs to the gate when he sees his mother, calling back to the teachers, " 'Bye! See you tomorrow!"

A Day in Second Group (*For three-year-olds*)[1]

The children begin arriving at a quarter to nine and go immediately into the cloakroom to remove their wraps. Edwin, the first to come, sits down on the bench and begins to tug at the top button on his snow suit as he chants, "Look what I did! I got the but-ton! I got the but-ton!" When Paul arrives, Edwin launches into a long account of how an airplane was flying over his Daddy's car when they were out driving. When Sara, Grace, and Frank come, the first two children are still sitting, conversing, making no effort to remove any more wraps. Then Miss Oliver comes into the cloakroom saying, "What's going to come off first, Paul?" Without a word Paul sets to work to take off his cap and mittens. The teacher remains in the cloakroom after that, giving occasional help with difficult snaps, tight rubbers or galoshes, or with pulling snow suits over heels.

Sara says to Miss Oliver, "We have a cardinal that wakes us up every morning, in our back yard. It's the daddy cardinal singing to the mamma cardinal." The teacher asks, "Have you seen the cardinal, Sara?" Sara answers, "No," and Miss Oliver says, "Do you know what color a cardinal is?" Sara smiles and responds, "You tell me." Miss Oliver explains, "He's bright red—redder even than your snow suit."

As soon as the children have taken off their wraps they go into the playrooms. Edwin runs into the smaller playroom where he suggests to Miss Learned, "Now let's play the vic-

[1] March 11, 1935.

trola." She plays some phonograph records, asking him to choose the ones he wishes to hear. Edwin is eager to play, among others, a cracked record he has found on the shelf; Miss Learned does so. But after a few measures Edwin decides, "Doesn't sound very good," and asks her to turn it off. He calls another child over to the phonograph, explaining to Miss Learned, "I want to show Roger how it sounds." He asks her to put the cracked record on again, and start the machine. The two boys look at each other and laugh.

At this point a research assistant, who wishes to take Edwin out for an intelligence test, sees that he is not too engrossed in the activity; so she asks him to come with her for some games. He goes cheerfully, for he knows her, only pausing long enough to say to Miss Learned, "Let's close the lid. I'm afraid if I go out it will fall down bang!"

Roger and Frank begin carrying the large hollow blocks from the hall into the playroom. Frank declares, "It's going to be a steam shovel," as he piles up the blocks, making a structure over three feet high, large enough for the children to climb inside and provided with blocks for seats. He sends Roger into another room to get a box full of smaller blocks for coal. Then Frank begins to throw them down between some of the larger blocks. He cautions, "I'll tell you when it's time to start. Now don't start until I say it's time."

When Edwin returns from the test he joins the group playing with the steam shovel. Tommy comes in and begins to play with the other boys soon after the game is started. Miss Learned stays in the room all the while. She warns the children against leaning heavily upon a wall of the blocks or points out that the structure is wavering or about to collapse.

In the large playroom, which Miss Oliver supervises, Marjorie begins pulling blocks out of the low open shelves in one corner. Using a variety of sizes and shapes she builds "a tower." Billy fits a series of thirty-eight interlocking cars together to form a train, which he pushes out into the hall, through the dining room, through the small playroom, into the hall, and back again.

Stephen has brought to school a flashlight, in which several of the children are intensely interested. Paul says seriously, "It looks like a Chinese flashlight. It does." Stephen explains, "It doesn't turn on. Doesn't have a battery in it." Alice says, "No. If it worked it would be filled up with a battery. Wouldn't it, Stephen?" Stephen nods, saying, "I'm going to take it home tonight and get a battery for it." Meanwhile, Helen is building with blocks near the cupboards. She warns the children as they run back and forth carrying blocks for their own buildings, "Don't knock it down. It's going to be a smokestack."

In the doll corner Jean, Sara, and Buddy are playing. Jean and Sara set the table with doll dishes and in preparation for a tea party bring water from the hall in a teakettle. Buddy works spasmodically at taking the dishes from the shelves, but most of the time he spends pounding on the xylophone in the doll house. When the party is ready, the children take bright squares of cloth from the doll bed and tie them around their shoulders. "Let's be a sty' show!" suggests Sara enthusiastically. Immediately, with the tea party forgotten, the children parade through the hall and the two playrooms, Buddy carrying the dust mop.

— At the aquarium, where they are watching the fish, Marjorie and Edward are soon joined by Billy, Tommy, and Barbara. Edward counts, "Four fishes." Billy counts, too. "It's five fishes." Miss Oliver goes over to the group and Tommy asks, "Can we take them out?" Miss Oliver explains, "Oh, they couldn't breathe if they were out of the water. They breathe water through their gills. See the little places in their necks that open and shut. That means they're breathing and they can breathe only when they are in the water. Fish always have to live in water." The children watch delightedly, pointing out the fish, laughing, and commenting spontaneously: "He's sticking his tongue out! Look!" "That one drank some water." "What is that kind of fish down there?" "That one is black down there." "Three red ones—four reds!" "They're all red." "No, but that's a goldfish. When they are red they

are goldfish." "I like the reddest one." "I like the spotted one." Barbara and Tommy walk away to build "a ferryboat" with the blocks. The others watch the fish a few minutes longer. Suddenly Edward squeals, "Look at him moving around! That one didn't die. Look at it swimming!" A few minutes later Billy, Marjorie, and Edward run out into the hall, lie down and roll on the floor, and wave their arms around. "Look," cries Billy, "I'm a whale. I'm swimming around. I'm almost drowned."

At the easel Paul is talking softly to himself as he makes long brush strokes from the bottom of the page to the top. "Railroad tracks. It's railroad tracks. And here's a yellow one that's crossing over." After this, on another sheet he paints a large red ball for a sun. Then he begins splashing blue across the sun and over the rest of the paper, saying, "Now it's getting dark. It's getting dark."

Alice makes a number of circles and ovals of different sizes, all blue. Inside the largest circle she draws three small circles. "That's a hoot owl," she says, pointing with her brush. "And it's Humpty Dumpty," indicating an oval.

At ten o'clock the teachers begin to remind the children that it is time to put things away. In the small playroom, the structure that had been a steam shovel earlier in the morning has assumed a mammoth height of over five feet and has become "a train." Miss Learned suggests to the four boys, "Time for one more trip on the train." Frank climbs up and sits on a block, saying slowly, "Choo-choo-choo-choo!" Edwin, Tommy, and Roger chime in loudly, "Ding-dong! Ding-dong!" In a moment Miss Learned says, "Now you're all through with your trip. It's time to put things away."

After this the children go to the toilet and wash their hands, independent of help for the most part. They need occasional help from the teacher on difficult buttons, but otherwise little supervision. One by one, as they finish washing, they go into the dining room for midmorning lunch. Miss Heiliger supervises this lunch. Roger asks, "Where do tomatoes come from?" "They grow in the garden," Miss

Heiliger answers, "I'll find you a picture of tomatoes growing and bring it to you tomorrow." As each child finishes his lunch, he returns his empty glasses to the tray on the serving table and throws his napkin into the wastebasket.

Then the children go into the small playroom and sit around the tables, looking at books and talking quietly. At Marjorie's request Miss Oliver reads a short poem to two of the children. Snatches of conversation come from one of the tables in the corner near the bookcases. "I have a book of Snipp, Snapp, and Snurr at home." "Yes, and we got one from the library, too." "That's a bear, isn't it?" "Yes."

In great excitement Helen, Paul, and Edwin discuss one of the pictures on the wall. "That's a tiger," says Edwin. "No, it's a lion!" corrects Helen. "Oh, no," says Edwin earnestly, "it is a tiger." "And that's a lamb," adds Paul. Edwin again disagrees, "No, it's not. It's a sheep." When the argument begins to resolve itself into "It's a tiger! It's a tiger!" and "It's a lion! It's a lion!" Miss Oliver walks over to the group and says, "Let's see how you can tell which it is. A tiger has stripes and a lion doesn't. Some lions have manes but tigers never do." "Then it's a lion," concludes Helen. "That's right," Miss Oliver assures them. "It's a picture of a lion—he has a big mane and he doesn't have stripes. I have a picture of a tiger to show you." Going to a file she quickly locates it and fastens it on a bulletin board.

Miss Learned says that they will have stories if the children will sit down quietly on the floor around her. Tommy chooses two of his favorite stories and brings Miss Learned the book. She reads those stories to the children first, and then she says, "I think I will choose the other stories today." After she has read two, Frank says, "Read the train story now." Miss Learned replies, "I will read the short train story now, because it is time for rest."

Miss Heiliger has arranged the rugs in the big playroom and the shades are lowered ready for rest. When Miss Learned finishes the story she says, "While you listen quietly I'll call

your names for you to tiptoe in to rest. Marjorie may find her rug." Edwin comments, "Mine has a bluebird. Is it my turn now?" One by one the children slip quietly out of the room for rest.

When the rest period is over and the children have folded their rugs Miss Oliver says, "Now if you will go over and sit down by the piano Miss Heiliger will play for you." Miss Heiliger tells them, "Here is some music, first, just to listen to." The children listen quietly till the music stops. Frank says, "I want *Tira-lira-lira.*" Miss Heiliger begins to sing and most of the children sing along with her. When it is over, Frank shouts, "Do it again!" They sing it two more times and always the request is repeated. After the fourth time, Sara suggests, "Now let's sing *Jingle Bells.*" The children sing this through once and then Miss Heiliger advises, "It sounds better if you don't sing it quite so loudly. Now let's try it again." They sing it again, after that, more softly. After they have sung *The Big Tall Indian* Miss Heiliger suggests, "Here is another one that is just to listen to." She plays *The March of the Wooden Soldiers.* When she finishes she shows the children the picture of the wooden soldiers on the front of her music. Jean says, "I want to sing it." Miss Heiliger explains, "It doesn't happen to have words, Jean, but would you like to make some for it?" "I want to listen to it," responds Jean quickly. Miss Heiliger plays it once more. "Play it again!" several children request. Miss Heiliger plays it again and yet again. When the children request it after the fourth time, she says, "Maybe you would like to do something with your feet to this music now." With a chorus of "Yes!" six of the children jump up and march about the room to the music. "Just once more," says Miss Heiliger.

The children go into the cloakrooms after that to put their wraps on. Miss Oliver supervises one room and Miss Learned the other. The teachers help to the extent of straightening out sweaters and snow suits, pulling on rubbers or galoshes for some of the children, and fastening difficult snaps, buttons, and buckles.

About ten minutes past eleven the children begin going outdoors. Miss Heiliger supervises the playground when the children begin to come out. Roger rides the tricycle around and around the yard shouting, "Here comes a truck!" In the sandbox Buddy is digging with a shovel and saying to himself, aloud, "There's so much coal in here I'm going to take some of it out." He shovels sand from the box into one of the wagons. "The wagon's gonna have a lot of coal," he says. When the wagon is filled he pulls it over beside the sand pit, extends a short board from the edge of the wagon to the pit, and shovels the wagon load of sand down the chute.

Meanwhile Edwin and Grace run up and down a long, flexible incline which leads to the sandbox. Carrying two sticks, one in each hand, Edwin stands on the edge of the sandbox and chants, "Isn't it nice to fish in the water and swim in the water! Fish in the water and swim in the water!"

While Sara is riding the tricycle around the play yard, Buddy jumps on the back of it, grabbing Sara tightly around the neck. As she struggles to free herself, she rides faster and faster, trying to push him off as she goes. She shouts, "Stop! Stop, Buddy! Get off!" When the teacher asks, "Buddy, does Sara want you to ride on the back of her tricycle?" Sara slows up and says emphatically, "No! Please, Buddy, get off." So Buddy jumps off, runs away, and climbs to the top of the jungle gym.

Roger tips over on his tricycle at one of the corners. As he picks himself up, he sees one of the wheels spinning around. "I'm driving to the filling station," he says and keeps the wheel spinning for a time. He looks up and sees thick smoke coming out of the chimney on a building close by. "It's smoky," he says, "from a furnace."

As he digs with a shovel in the sand, Stephen is talking to himself. "Gonna dig for a sewer. Diggin' for a sewer." Roger, who is riding past on the tricycle, stops to ask Stephen, "What is that—a hole?" "No, that's a sewer in the street," Stephen answers. Roger rides away and Stephen continues digging and talking softly, "Digging for a sewer. Sewers in the street."

In another part of the yard, Buddy is loading two empty boxes onto one of the wagons. He climbs up on top of them and yells, "Some one give me a push!" So Paul goes over to push him in the wagon. Edwin is marching up and down the sidewalk, shouting, "Toot-a-toot! Toot-a-toot! The Indians come! Scram!"

At a quarter to twelve the parents begin to come for the children. The last child to leave is climbing on the jungle gym when Miss Oliver calls to her, "Jean, here's some one for you!"

A Day[1] in Third Group (*For four-year-olds*)[2]

It is a cold day with deep snow in parts of the yard, while in others the ice shows through. Some of the children are sliding. Tim and Billy are pulling a wagon through the drifted snow, digging it out when it gets stuck. Another group of three children is hauling snow lumps over to a corner of the yard, where Sidney is sifting them through a wire screen. As the snow sifts through, one of the boys is collecting it and molding it into round balls on a table near by. Later it becomes apparent that the boy sifting is the miller and that the round balls are rolls which the baker has made. It is evidently a dramatization of a song the children had heard the day before:

Blow, wind, blow and go, mill, go!
That the miller may grind his corn;
That the baker may take it,
And into rolls make it
And send us some hot in the morn.

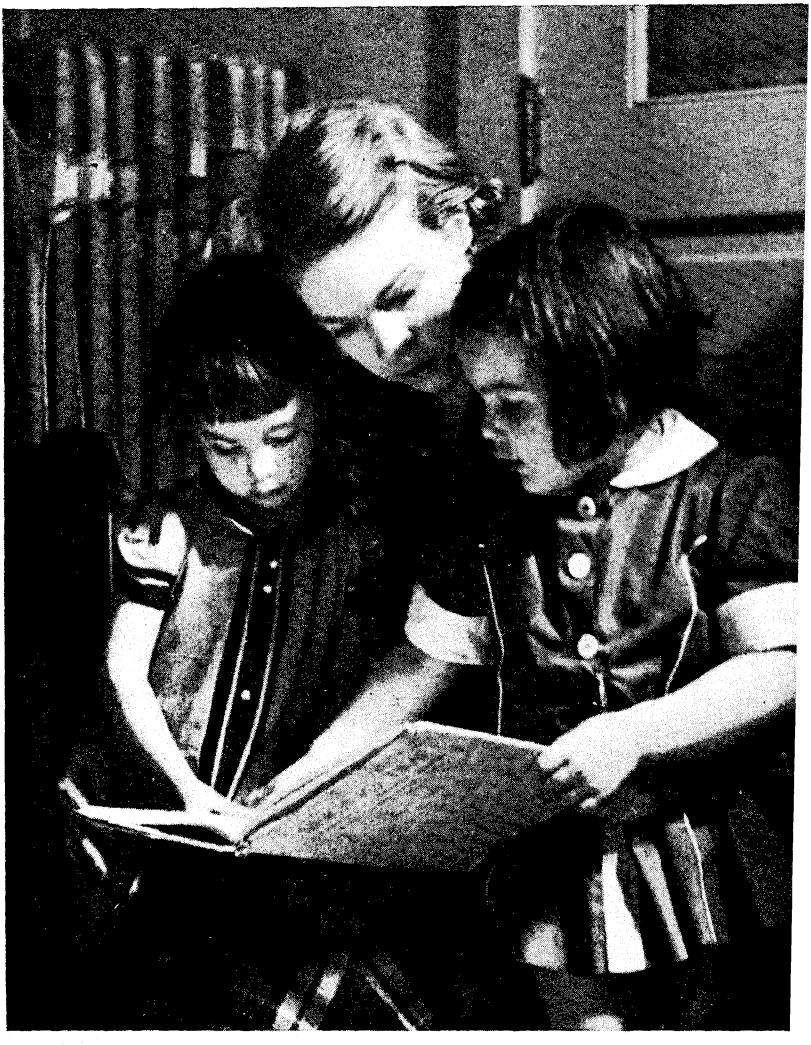
[1] March 1, 1937.

[2] This group of children comes only in the afternoon The group is divided into two sections, one half of the entire group, or twelve children, sleeping in the early part of the afternoon and the other half sleeping during the late part of the day.

As a means of indicating which group is being observed, they will be designated group A and group B. Group A goes immediately to the play yard on arrival, the first member of the group coming at ten minutes to one, the last about ten minutes after one. They come out, greet each other, and begin immediately a rather active type of play. There is little conversation.

Each child in group B, removing his wraps, goes first to the toilet and then upstairs to the sleeping porch.





There is very little conversation but much activity. Some of the children are carrying sleds up the steps of the incline and sliding down across the yard. Others are vigorously shoveling in order to clear the way for the wagons. Helen and Louise have pulled the teeter-totter onto the ice, and have found that they can whirl the entire piece of equipment around while they are going up and down. It gives the appearance of a merry-go-round and they laugh heartily over their discovery.

A few of the children leave the miller and baker and climb in the climbing apparatus, adjusting a large board at the top which they say is for the tigers. Two of the "tigers" get a sled and pile a number of large hollow blocks on top of it. These they haul to the jungle gym so that they can build an enclosure around the "tiger's house." They call out in warning to Howard as he goes by, "Don't knock the fence down. It's a tiger's fence." "I got coal," he responds, "You want some coal?" "No. We don't need any coal. Tigers have warm coats," one of the tigers yells back. This seems to satisfy the coal dealer as he goes off to the large box in the far corner of the yard and shovels his load of coal into this house.

He is just finishing his unloading when he is told by Miss Field that it will soon be time for him to go indoors. She goes from child to child telling the tigers, the baker, and the miller that it is time for them to get ready to go indoors. The tigers crawl over to the steps. The baker gets a ride in the miller's wagon and the coal dealer parks his truck near the fence.

It is now one-thirty. The children come into the cloakroom and take off their wraps. The tigers are still quite fierce. Miss Field says, "You tigers will have to be quieter indoors." "We know. There's babies upstairs sleeping," announces one of the tigers, referring to the children who take their nap in the early group. The others laugh over this remark, as does the teacher. As she goes from one to another, helping a little in taking off some snow suits, overshoes, or unfastening difficult snaps, the teacher sings in an informal way, the children joining in now and then. The children are able to take off

most of their wraps and hang them up without help. From here they go to the lavatory in the hall and wash their hands, then into the front room for a short period of quiet activity.

Betty and Elsie select a puzzle from the shelf and take it to a table. Betty picks up a piece and says, "Here's a sky." And Elsie replies, "I found the sky, too, the sky—the sky—the sky." Chanting in a sing-song way, she puts her sky and Betty's together.

At another table two boys who are looking at an animal book find a snake picture. Coming over from his side of the table to look at it, Bob remarks, "Let's see. I believe those are snakes." "Yes," says Jack, "poison snakes." Miss Field stops near Jack and says, "Jack, that's a garter snake. Are they poisonous?" "No," says Bob. "They won't hurt you, will they, Miss Field?" "No, Bob, they won't. They're friendly snakes."

One of the boys has taken some pictures from the shelves and is sorting them carefully. Finally he takes one to Miss Field. "I want this one," he says. "Very well, George. Here are some thumbtacks." She helps him put his picture on the low bulletin board. Marjorie comes into the room and stands watching the procedure. "I don't like that picture," she announces. "I don't care," says George. "It's a good boat. It sure is, isn't it, Miss Field?" "Yes, George," answers Miss Field, "The ship is in full sail, isn't she? Do you suppose the little boy made that ship himself?" "Yep, maybe," says George, standing back and looking again at the picture.

Three children are by this time settled on the low white bench on the other side of the room. The middle one, Jean, is holding a book and evidently telling the others the story of the Mouseling Family. Tim is looking at *The Fire Engine Book* at a table by himself. From time to time the children obtain different books and puzzles or go about quietly from table to table watching for a few minutes. They ask each other's help occasionally on the puzzles or talk together about the books or pictures, but the whole atmosphere is one of quiet.

Miss Lack comes into the room with some books and seats herself in a chair in one corner of the room. One by one the children put away their books, pictures, and puzzles on the shelves and join her, sitting on the floor. The teacher says nothing. On the shelf above them, where the entire group can see it, is a small wooden house which the children have made. Miss Lack opens the book *Sung under the Silver Umbrella.* "I know what that one is," says Betty, as the book is opened and the printed page held up for them to see. "Which one is it, Betty?" "'Bout the house," says Betty. "Yes. Here it is." Miss Lack reads the poem. She follows this with two poems from another book, the children saying parts along with her. "And when the stars wink, he's asleep in his bed," says Miss Lack, finishing the poem about Pat. "Yes," agrees Tim solemnly. "When the stars twinkle, Pat's fast asleep." "Read the one about Jack Frost," requests Sidney. Miss Lack reads the poem about the frost flowers that were painted on the windowpane, "but when the morning sun touched them with his golden beams they vanished one by one." "What does 'vanish' mean?" asks Julie. "Come away," replies George. "See Julie, they melted."

"Shall we have one of your favorite songs today, Jean?" asks Miss Lack, selecting a song book from the pile on her lap. Jean asks for *Frére Jacques* and all sing in French with Miss Lack and Jean. A child requests *Brother John* and the group then sings the English translation. Miss Lack asks, "Do you remember the song we sang yesterday about the miller?" "Yes," says Jack, "That's it," pointing to the picture. Miss Lack holds the picture and music up as she sings. "I want the airplane song," says Tim, "'cause I'm making an airplane." Following this the children have turns choosing songs. They choose *The King of France, Rock-a-bye Baby,* and *The Indian Songs.* The last ones being lullabies, some of the children stretch themselves out on the floor pretending to be asleep.

At last Miss Lack says, "Now will you listen, all you sleepy people? I'm going to tell you a story about yourselves." She

begins a story including each child and what he has done the day before, as well as what possibilities there are for activities today. After each child listens to his part of the story he goes to the hall and gets himself a drink of water, then goes about finding wood, paint, or whatever he wishes to work with. Jack decides not to finish the chair he has started but settles upon block building instead. Miss Lack says, "All right, Jack. You had better think about that building first. We'll come in and see it when you've finished." "O.K.," says Jack, going off into the playroom by himself to build. Four children go to the workbench in the studio room and another four to the workbench in the dining room. Two children put on aprons and select paint for their easels in the small front room. Tim is putting a propeller and a wheel on his airplane. Betty has one more leg to make for her chair. Her table which she has completed is on the workbench and she is comparing the chair legs with the table legs. She finds the chair too high for the table. She gets a ruler from the shelf and with help measures each leg and draws a line where she intends to saw them off in order to make them short enough. George comes in from the other room to show the children his birdhouse. "See," says George, "Here's the roof and here's the doors." The doors have been made with the brace and bit. "Yes," says Miss Lack, "just about the size for wrens." George smiles, goes over to the low shelves, and selects a sandpaper block with which he begins to rub the roof and doorways of his birdhouse. Billy and Ellen in the front room at the easels want to show Tim and Betty their paintings. Tim and Betty and Miss Lack leave the workbench and go into the front room to see what Billy has been painting. "See," explains Billy, "That's the lone-star ranger." "What's this underneath him?" asks Tim. "That's his horse." "Well," says Betty, "Why don't you make some grass for the horse?" "I did," insists Billy, indicating a narrow green line. "Why don't you make more grass? This could be ground," and Betty runs her hand over a large surface at the bottom of the paper. "I don't suppose the school has any brown." "You could mix some, Billy," suggests Miss Lack.

Tim goes back to the workbench and finishes putting one wheel on his airplane. "You need two more wheels," says Betty. "Yes, one back here and one here. That's the guider wheel," indicating a place near the tail of the plane. "Yes, it's a twin motor," he continues. "What does that mean?" asks Jerry. "That's two motors," pointing out two nails sticking up on the wings of the plane.

"May I paint my birdhouse today?" asks George. "I don't believe you'll have time today, George, but you can work on it tomorrow." George and Tim begin bringing their various pieces of wood for Miss Lack to write their names on. Betty and Barbara are busy printing their own names on their work. These they then take to their lockers to put away until another day. Miss Lack collects the tools. The children gradually put their work away, then go to the toilet, and wash their hands. Miss Lack in the meantime has had a chance to see Jack's block construction. She discusses it with him. He has made a bed out of blocks which he claims is just his size. Miss Lack asks some of the children to come and see Jack's bed. Jack gets into the bed to show them how it fits. They agree that it is just the right length. As the children leave the room Elsie stops at the rabbits' cage and watches the white rabbit hopping about. She goes off into the kitchen and brings back a handful of carrot tops, selected from a box of cabbage leaves, celery tops, and lettuce which is the rabbits' own supply kept on a low table in the pantry. "This rabbit likes carrots best," Elsie announces, stuffing the carrot tops into the cage. "That's Snowball," corrects George. "Well, Snowball, then."

One by one the children gather again in the front room to hear Miss Field read *The Poppyseed Cakes.* Here and there the children repeat words with her or correct her when she leaves out or puts in any extra ones. One of the children asks to see the pictures but Miss Lack says, "We aren't going to have the pictures today; we're just going to listen to the story." This seems to be satisfactory, as there are no more requests of this nature.

Following the story, the children go into the dining room, a few at a time, where cod-liver oil in little glasses and tomato

juice in glass mugs are ready for them on the serving table. Each child takes the cod-liver oil, then the tomato juice, wiping his mouth with a paper napkin which he throws into the wastebasket near the far end of the table. As they finish they go upstairs to the sleeping porch to bed. Miss Field goes up with them, giving each child a pair of shoe covers which he pulls over his shoes when he reaches his bed. The room is cool and dark. As the children climb up on to their beds, Miss Field helps them to cover themselves with a blanket. All the children in this group A are in bed and quiet by three o'clock. They sleep or rest until four-thirty, Miss Field remaining on the sleeping porch with them, sitting with some who need special help to relax, reminding some who need verbal reminders, but in most cases merely watching while she herself remains unobserved. Miss Field records the time that each child is in bed, when he is asleep, when awake or awakened.

At four-thirty the children who are awake come downstairs. They go to the toilet and rinse their hands, coming in to join the group in the front playroom. They sit quietly about the victrola and listen as Miss Lack plays *Bolero*. Betty asks for a march. Miss Lack puts one on, suggesting toward the end of the record that they march out and get on their wraps. This they do, since it is almost time for them to go home. Some parents take their children as soon as they have their wraps on. The remaining children go out in the yard and play for a few minutes under Miss Wagner's supervision until their parents come. All the children are called for by five or shortly after.[1]

A Day in Junior Primary (*For five-year-olds*)[2]

From the time the children arrive in the morning (any time after a quarter to nine) until the nurse comes to inspect them (about ten minutes past nine) they are free to do whatever

[1] Group B has much the same program as group A, except that the time for sleeping and for play are reversed.

[2] April 4, 1935.

they wish. Jack begins to straighten up the store, folding paper bags and putting them under the counter, arranging boxes of breakfast food on a shelf, and carefully sweeping the floor. Mary, Betsey, and Donald take books from a bookcase and sit in the window seat to look at them. David pushes John about the room in a wooden cart which the children have made from a large box and four wooden wheels. Since Tom has brought some new stamps for his collection, Miss Stormes is helping him mount them in the stamp book he is making. When Fred comes in with a dead snake a foot and a half long pinned to a newspaper, several children gather around to look at it. Alice gets the magnifying glass and the children pass it around for closer inspection. "He's a dead snake," Fred explains. "When we found him he was dead, in the park across the street from us."

Just then Miss Peterson brings out the rag rugs which the children are weaving for the playhouse on small looms, and four children begin to work on them. "I need another piece sewed on mine, Miss Peterson. You sew it on," says Frank, bringing her a long yellow strip. "I'll help you sew it on," Miss Peterson says. She threads a needle, catches the two pieces of cloth together with a few stitches, and hands the needle to Frank. After taking several very large stitches and snipping the thread, he goes back to his chair and begins to weave again. "I only have one more row to do, Miss Peterson," says Nancy, holding up her frame. "I think it will be more rows than that, Nancy," advises Miss Peterson. "Are you keeping it pushed back and weaving it very tightly up against the next row?" Elizabeth and Susan get their boxes of crayons from the cupboard and some paste, scissors, and colored construction paper from the supply closet. At their place in the window seat, Elizabeth draws a sailboat on blue paper and colors it green. Susan cuts squares of various colors and pastes them on a sheet of orange paper in checkerboard fashion.

When Miss Chennell, the nurse, crosses the room and sits down on the window bench, the children immediately drop

whatever they are doing to form a line in front of her. She looks carefully at each child's throat, hands, and wrists, and at his chest and the back of his neck.

"Let's all sit down over here on the floor as soon as you have seen Miss Chennell," says Miss Stormes. "I saw a robin this morning," David tells her as he sits down. "Well," comments Miss Stormes, "that will be a good piece of news for the newspaper. And we will have to add it to our list of things that tell us spring is here, too."

"Let's fix our weather report first," she suggests when all the children are seated on the floor. She pulls the easel out where all can see and pointing to the weather report of the previous day asks, "What does this say?" "Cold," several of the children answer. "Do we want to leave that up?" Miss Stormes asks. "No," says Frank, "it isn't cold out." "Do we want to leave this up?" asks Miss Stormes, pointing to the next item. "It says wind," reads Alice. There is some argument as to whether it should stay or not, three of the children maintaining, "No, it's not windy out." "Isn't it?" asks Miss Stormes; "Look out the window—what's happening to the trees?" "They're waving," answers Barbara. "I think it's windy." "Well, shall we leave 'wind' up?" the teacher asks. There is a chorus of "Yes," and she continues, "What's this other word?" "Cloudy," Tom responds, "but it isn't cloudy today." "What shall we have instead?" Miss Stormes asks. "Sunshine," Tom answers. "Suppose you come and fix our report for us, then, Tom," suggests the teacher. Tom selects the slip which reads, "sunshine," but has some difficulty deciding which one reads "warm," so Jack is appointed to help him find that one. Tom removes the slips "cold" and "cloudy" and fits the new words into the frame on the easel. Having finished, he steps back and as Miss Stormes points to each word, he reads it aloud, "warm, wind, sunshine." "I would like to read it," says Barbara and she does.

"Now, who has a piece of news for the paper this morning?" asks Miss Stormes. "We'll write yours about the robin,

first, David. Tell me how I must write it down." "Say 'David saw a robin this morning.'" Miss Stormes prints as David speaks. "All right," she says, looking up, "I'm ready for another piece of news." Seven children have news items for the paper this morning and, one at a time, they tell them to the teacher. "We have three pages of our paper filled this morning," she says finally. "Perhaps we can find a picture to paste on the last page. I'll read you what our paper says.

"David saw a robin this morning.

"We have twins in Junior Primary this morning. Barbara and Alice have on dresses that are just alike.

"We painted yesterday. Elizabeth and Tom painted the sink. It was painted green.

"There was a car without any tires on it, and it made such a noise that Susan had to hold her ears. The wheels went rat-a-tat-tat.

"We had two turtles. Now we have three because David brought one.

"Frank and Donald made braces for the chimney.

"We have some African violets in our terrarium."

"How would you like to talk about the snake Fred brought, before we get too busy this morning?" asks Miss Stormes as she lays the newspaper aside. There is a chorus of "Oh, yes!" So the snake is laid on the floor and the children kneel in a circle around it.

"What kind of a snake is it?" Donald wants to know first. "It is a ribbon snake," Miss Stormes answers. "Sometimes it is called a garter snake, but its real name is a ribbon snake. This is only a middle-sized ribbon snake—sometimes they grow to be about this long." She measures with her hands a snake about three feet long. "My taxicab man had a snake on his front fender and he was this long," puts in John with emphasis. "If it was as large as that it must have been a bull snake," says Miss Stormes. "Ribbon snakes," she goes on, "are very fond of water and hunt most of their food near the water. Do you know what they like to eat?" When the children murmur, "No," Miss Stormes asks, "What lives in water?" "Frogs," says Nancy. "And fish," Mary adds.

"Yes, they eat small fish, frogs, and polliwogs and tadpoles." The children laugh and repeat "Polliwogs!" several times. "Snakes swallow their food whole," Miss Stormes continues, "but they can eat things bigger around than their bodies because they can open their mouths very wide and their bodies can stretch, too, so there's plenty of room even if they swallow whole frogs." "Our student girl found a snake once with a frog in him," volunteers Barbara.

"Where have the snakes been all winter?" Miss Stormes asks. Since there is no answer, she explains, "Down in the ground, or under rocks. In spring when it begins to get warm they come out and bask in the sun. How do you suppose they feel when they come out in the spring? Don't you suppose they are hungry and cold? This snake was probably hungry and looking for food. Perhaps he had just crawled out of his hole." "And a man killed him," adds David with great feeling. "I think it's too bad we kill the snakes that live around here," comments Miss Stormes. "I think they're nice," says Fred. "I think they're just as interesting as can be," the teacher agrees. "Wouldn't it be fun to have a live one?" "I'm not afraid of garter snakes," Susan says proudly. "Better watch out for bull snakes, though!" Donald warns. "Oh, no," assures Miss Stormes, "they won't hurt you any more than a garter snake would." "But a rattlesnake!" Donald says very decidedly. "That is a dangerous thing," Miss Stormes agrees. "One time we were on a picnic," Tom begins, "and we were just sitting by a bush and eating our sandwiches and—a rattlesnake popped out!" "How did you know it was a rattlesnake?" the teacher asks him. "Oh, well, he was coiled up," Tom explains seriously. "All kinds of snakes can coil up," Miss Stormes tells him.

"Have you ever felt a snake?" she asks the children. "They are dry, and a little cold, but they don't like to be cold. That's why they lie in the sun, and they like to feel the warmth of your hands. If you held one in your hands he would curl up in them." "Is a snake soft?" Jack asks. "Touch this one and see," suggests the teacher. Jack reaches out and

touches it. "Not very soft," he decides. "No," explains Miss Stormes, "because he has bones in his body." "Like we do," Alice says. "Do you know if snakes have teeth?" the teacher asks. "Oh, yes," several children answer. "Yes," she agrees, "they do have teeth, but their teeth slant back so you see they couldn't bite very much. That's why they can't chew their food up, but have to swallow it whole. Do you know how a snake walks?" she asks. "They don't have legs," replies Betsey. "No, they don't," says Miss Stormes. "Their skin has scales all over it. Fish have scales and so do snakes." She turns the snake over, saying, "See the scales on its belly. The loose part of each scale catches on the grass and helps the snake move along."

"Tell some more about his mouth," Donald begs. "He has a long tongue in his mouth," Miss Stormes begins. "Did you know he could smell with his tongue just as you smell with your nose? He can feel with his tongue, too, just as you feel with your fingers. When snakes eat," she goes on, "they get fatter and fatter and pretty soon their skins get too tight for them." "And they get a new pair of skin," Fred contributes quickly. The teacher nods. "Their skins get loose around the mouth and eyes and they crawl in and out around the rough places and peel off the old skin. Sometimes they do that three or four or five times during a summer, depending on how much they find to eat and how fast they grow. The third grade has a good snakeskin and I'm going to borrow it to show you." She stands up, saying, "Well, I think that's enough about the snake for today. Now we have some sandpapering to do before we can paint any more furniture for the playhouse. I'd like about two people to work on that job."

Several of the children stay on to look at the snake through the magnifying glass, while David and Jack set to work sandpapering the furniture. Donald, Barbara, and Susan work on the rug weaving. In the window seat Nancy and Mary color, cut, and paste. Elizabeth and Alice go into the playhouse, where Frank and Tom soon join them, the two boys

looking at books in the living room while the girls bring dishes from the kitchen and set the table. When Alice asks, "Shall we pretend we have orange juice instead of coffee?" Elizabeth agrees. "Now we're going to have company this afternoon, dear, so get out the dishes. This morning, too," says Alice. "Oh, no," replies Elizabeth definitely, "we don't have company in the morning." Alice changes the subject, "I know. Shall we bake a pie for baby?" She takes the teakettle from the cupboard and sets it on the stove, saying, "I'm making sirup, using sugar and water." "I'll have to make the waffles," volunteers Elizabeth, coming into the kitchen.

Soon all four children are seated at the table and in a few seconds they have finished their meal, with Elizabeth laying her napkin down and asking in a most businesslike tone, "Now, who would like to wash the dishes?" In the silence that follows, she turns to the two boys and, ushering them into the living room, says, "I'll read you a story. You sit down on this little stool while I read to you." Alice, left alone in the dining room, cheerfully sets to work to stack the dishes and carry them to the kitchen sink. Leaving the house, the other three go over to the store and rearrange some of the shelves. Having put the dishes away, Alice takes the doll out of bed, undresses it, gives it a speedy bath, and puts it back to bed.

Elizabeth, who returns from the store with two cans of soup and a box of Post Toasties, begins giving directions as soon as she gets inside the house. "Here, put them in the kitchen," she says, handing the groceries to Alice. "You call Charlie and ask him if he can come," she orders Frank as she dresses the doll. After slumping in a chair in the living room and murmuring into the toy telephone, Frank goes to the door of the bedroom to tell Elizabeth, "It's telephone for you, Mother. Maybe it's a party for baby." "Tell her just a minute," Elizabeth answers. But the "minute" lengthens into three or four and Frank wanders away to help with the sandpapering. Elizabeth buttons a sweater on the doll and directs Alice, "Call the people up and tell them baby can't

come." Alice picks up the telephone. "I'll tell them she has a bad cold, shall I?" she asks. When she puts down the phone, Elizabeth tells her, "You'd better go to the store and get the things for supper."

At the store Alice leans on the counter. "Cream," she orders, and then, "Salt." Tom takes a box of salt from the shelf and weighs it on the scales before handing it to her. Next she orders, "Milk." "I gave you some," he tells her, pointing to the bottle. Alice nods and replies, "We need sugar, then." When Tom hands her a box, she takes it and starts away; but he reminds her, "Better give me the money." Then Alice puts some imaginary money in his hand and starts away again. "I better give you some. Wait, Alice," he calls. So Alice holds out her hand for the paper money which Tom hands her, one piece at a time, as he counts very professionally, "Thirty, fifty, fifty, and seventy, eighty cents. Thank you!"

At a table Betsey, Fred, and Allen are looking at pictures through a stereoscope. "That's where the government is," says Fred holding it out for Betsey to see. Though Betsey nods, he turns to Miss Peterson, asking, "Isn't that where the government is?" Miss Peterson agrees, "Yes, Fred. It's a capitol building." "It's a capitol building," Fred repeats to the others. "Look at this one," says Betsey. "O-o-h, yes, it's an ostrich," declares Allan. "Let me see," Fred demands. Betsey holds it out only a moment. "Wait, I didn't see," he protests and grabs it. Here Miss Peterson intervenes by suggesting, "You know I think it would be a good idea to put all the pictures about birds in one box and all the other kinds of pictures in another"; whereupon the three children set to work. And so the pictures are sorted with few arguments, the comments being, "Here's birds." "No, that doesn't go there." "Yes, but these do too go in this pile." "No, but there isn't any bird in this picture." "Oh, wait, that's the bird pile."

At twenty-five past ten, when the music teacher comes, Miss Peterson tells the children, "Put all your things away as quickly as you can. See how quietly you can get ready for music." As they clear their work from the tables and line up

near the door, Miss Peterson says, "The housekeepers had better stay to get the lunch ready." The children look on the bulletin board to see whose names have been posted as "housekeepers." Barbara and David read their names and do not go with the other children to music.

After the others have gone, Barbara and David straighten the chairs at the tables, count out the doilies and napkins, and put them beside each place. Then as Barbara pours the cups of tomato juice in the kitchen, David carries them in, one at a time, on a small tray. "Whoops," exclaims Barbara, as she pours the last cupful, "That one's pretty full. It better be for a teacher."

Returning from music, the children find places at the tables and drink their tomato juice, laughing, playing, and conversing with one another all the while. "She drank hers fast," Allen says of Nancy. Nancy laughs and twists her napkin, making a moustache of it. Elizabeth, Susan, Donald, and Jack, who sit at the table which has the aquarium in the center, watch the fish and whenever one swims to the side of the bowl one of the children exclaims, "I've got one," or "There's two on my side now." "I have one and you have one," Jack says to Susan. "Donald's got four now," adds Elizabeth.

While they are still seated, Miss Stormes suggests, "See how quietly you can get your rugs." "Nobody hardly pushed in the chairs," Mary says and frowns as she straightens them. Barbara and David clear the tables, first taking away the cups on a tray and later collecting the used napkins. Although the children put their rugs down in any spot they choose, Tom and Fred, who have put theirs down in front of the kitchen door, have to be asked to move over near the windows. "You should use judgment when you put your rug down, and be sure you're not in anybody's way," Miss Stormes tells them. All the children are settled and resting quietly by ten minutes to eleven, though some finger the fringe on their rugs or run their hands along the floor boards and others whisper to themselves.

Just as the children are ready to get up, a student from the sixth grade steps into the room. Miss Stormes says, "Good morning. What can we do for you?" The answer is, "First, the sixth grade wants to thank Junior Primary for all the books you brought for the Faith Cabin Library. You brought more books than any other grade in the school. And we wondered if you would like to come to our assembly Friday morning. It is going to be a program about the Negroes." "Yes," spoke up several of the children.

"All right, then," went on the girl, "We will come for you at eleven o'clock." "What shall we say to Eleanor?" suggested Miss Stormes. "Thank you," chorused the children.

"That's where they play on the stage," contributes Frank. Miss Stormes says, "The sixth-grade children will be on the stage and they will tell you interesting things about the Negroes. Perhaps they will sing some Negro songs and say some Negro poems. And that will be the assembly. Now what will you be?" asked Miss Stormes. Several children reply, "The audience." "The Faith Cabin Library," answers Henry. "I think they are going to have a Negro talking," says Jim. "Are they?" "There's a real Negro because Jackie went to an assembly where they had a real Negro. Jackie said they would dress up like real Negroes," contributes Caroline. John adds, "Maybe they'll put on a ranger mask 'cause it's black."

"I don't believe the children will dress up like Negroes," contributes Miss Stormes. "Do Negroes talk like we do?" "No," answer several children. "Do Negroes talk so that we can understand them?" asks Miss Stormes. "Yes," several children answer. "You speak English and Negroes speak English, but Negroes say many of the words differently from the way you do. We say that the Negroes speak the Negro dialect." Lee adds, "In different states people talk differently." "There are going to be real niggers, too," and "Nigger," "Nigger," "Tar baby," "Nigger baby," come from several children.

"Is it polite to call the Negroes, 'nigger'?" asks Miss Stormes. "No," reply several children. "Polite people and

people who do not want to hurt other people's feelings call them Negroes. So what shall we call them?" "Negroes," reply the children.

"Miss Crawford, the sixth-grade teacher, told me that one of the children is going to read a poem about dawn. And I wonder if you know what dawn is?" "Dawn, what is that?" asks Henry. "Have you ever waked up in the night and looked out of the window? How does it look out-of-doors?" asks Miss Stormes. "Last night I got up and Mother was sick. I looked out of the window and saw a big, full moon." This is Jack's contribution. "When the sun comes up it's dark out-doors," suggests Bobby. "And dark in China," adds Jack. Miss Stormes continues, "When it begins to grow light after the dark night you can begin to see the trees and houses better than when it was so dark. You can see the sunrise color come into the sky. We say that dawn has come. When the sixth-grade child gives the poem about dawn, you will know what time of day she is talking about."

Picking up a book, Miss Stormes says, "I have a new storybook I think you will like to hear. It is about a little colored boy." "A colored boy is a Negro," interrupts Jack. Holding the book in front of her at a level where the children can see it easily she points to the word *Nicodemus* on the cover and says, "The name of the book is *Nicodemus and His Grandpappy.*" "That's a new Nicodemus," says June. "What do you call your grandpappy?" asks Miss Stormes. "Grandpa," "Grandad," "Grandfather," come responses from several children. "Do you think Nicodemus is going to talk as you do?" asks Miss Stormes. "No," says a child. "He's going to say Negro dialect." "I looked at that book once," says Jack as Miss Stormes turns to the first pages.

"I haven't seen those pictures," suggests a child, and Miss Stormes turns the book so the child can see it. "Why is he crying?" "Why is he sitting on the branch and crying?" ask several of the children. "We'll see why he is crying," she answers.

Miss Stormes begins to read the story in the Negro dialect. Some of the children are quiet at first, but some are snickering



and laughing at the sound of the dialect. Miss Stormes reads the story exactly as it is written with real liveliness and naturalness. She stops reading at appropriate places to allow children to comment. The first pause brings forth the following: Grace says, "I have that book." Bruce says, "He got his foot cut, that's why he isn't home. And they're both going to be tied." Miss Stormes pauses for another moment while the children look at the pictures. "Where's he going?" asks John. "Oh, you'll find out," replies Bruce. "There's a picture of the dog," adds Barbara. Miss Stormes says that if people go where they don't belong, they may get into trouble. "Yes, that's true," replies Bruce.

A few children move around to the other side of the circle so that they can see the book better. Miss Stormes continues reading the story. She reads about Nicodemus's meeting the bear in the woods. She imitates the growl of the bear, at which several children snicker and exclaim. "Oh," Bobby says, "I want to see what will happen." The story continues about Nicodemus hunting for his dog. Finally he hears his dog's cry, and discovers that he has caught his foot in a trap. Miss Stormes pauses again. Several of the children sigh, and Jack says, "Oh." Arthur asks, "Was his foot in the water?" "No, it was in some glass, I think," answers Bobby. "He couldn't hop on the other leg because it was hurt," says Jack. "Yeah," adds Bobby.

When Miss Stormes finishes reading the story, she asks, "Did you like this story? What did you think about it?" "That's a sad story, sort of," offers Henry. "Yes, where the traps got in," replies another child. Other children add comments such as these. "I think it's a nice story"; "I think it's too sad." One child asks, "How did he get into that trap?" To which Jack answers, "'Cause he didn't belong there." "But they caught the little poor dog," adds Henry. "Yes, and that's too bad," adds another child.

Finally, at quarter past eleven the children get their wraps and go outdoors for the last thirty minutes of the morning. "Alice and Elizabeth and Tom and Frank were all playing in the doll house this morning and they will need to clean up in

there before they can go out," Miss Peterson reminds them. The children put the books back in the bookcase in the living room and the dishes back on the shelves in the kitchen. They pick up the doll clothes off the floor and pile them on the bed.

When the children reach the play platform, six line up to wait for turns on the slide. Miss Peterson unlocks the box of sand toys so that the children may take what they want. Fred begins to dig a hole in the sand but Donald stops him. "No, Fred, now wait," he says. "We made another plan. We're going to make a big Eskimo house." He begins to fill in the hole Fred has dug.

"It's warm out today, isn't it?" Susan asks Alice, as they make "cakes" and "pies" in the sandbox with scoops and buckets. John is hanging onto the trapeze and kicking his feet in the air. Jack and Nancy take turns trying to turn over while they swing on the rings. Five children play on the seesaw, laughing and singing together. Tom keeps trying playfully to push David off one end and when he finally succeeds, David picks himself up, laughing, to run and sit at the other end behind Mary.

"I see a canoe! I see a canoe!" chants Allen, pointing toward the river. Allen, Jean, and Fred are all standing at the other end of the platform, watching a ball game on the lower playground. "He can kick it far," observes Jean. "Boy, yes, and fast too!" Fred agrees. "I wish he'd kick it up here," Allen says. "I bet he could kick it way past the sky," declares Fred, admiringly. "There's a canoe again," Jean points out. "It's a green one. Oh, it's the same canoe," Allen says. "Lookit, there's two people in it."

At a quarter to twelve Miss Peterson takes the children up to the terrace in front of the school building. Several children start home, walking by themselves; the others wait until parents or taxis call for them.

In regard to these four days' observation as a whole, there are certain facts which should be indicated. The descriptions are those of one observer who could neither see everything which went on nor succeed in recording everything seen. Not

only are there certain physical limits of the observer, but at most times activities are going on simultaneously in several parts of a building.

Furthermore, even if it were possible to record everything which occurred, there would still remain undescribed both the planning in the background for a day's activities and the judgments and controls exercised inconspicuously by the teacher, frequently in such a way that her part in a situation cannot be apparent to an observer. The very pieces of equipment available on any one day are due to her foresight. Opportunities for utilizing his experiences through question, discussion, dramatization, constructive activity, and the like are there because the teacher has made available to the child time, space, and freedom from distraction and interference. The nature of her controls is planned to be as indirect as possible, in that she attempts by providing and arranging equipment, by occasionally redirecting ideas, or by questioning, to keep activities moving in a constructive manner and to enable the individual child to find those suited to his needs. It is true that in the case of Third Group and Junior Primary the teachers' activities are more apparent. The child in these groups has so developed that he is capable of wider interests, has more advanced types of social contacts, has greater language ability, and can remain longer at one activity. In the last analysis, the teacher is the child's key to his environment and, through her interests and her utilization of his increasing awareness, she works to provide adequate stimulation of all phases of his growth.

Finally, there are certain fundamental objections to discussing a child's behavior and his contacts with his teacher without mention of the nature of the specific child. Also, to give observations of one day without its particular setting in relation to previous days or in relation to plans over a period of time may be somewhat misleading. Therefore, these observations should be considered in the light of these facts and utilized only for the purpose for which they are given, that of portraying a general impression of school for the child from two to six.

II

The Child's Introduction to the Preschool

Prior to School Attendance

Application for Enrollment in the Laboratories

Applications for enrollment in the preschool laboratories are made to the preschool secretary at any time during the year. At that time the following information is secured: the child's full name, his date of birth, his father's name, address, occupation, and home telephone number, the time at which it is desired that the child will be enrolled, and the probable period of attendance.

Approximately one month before the beginning of a new session, the supervisor of the laboratories sends a letter to all parents whose children's applications have been registered. This letter outlines the procedure of registration, asks the parent to give notification if the application is not to stand, and gives information about the making of appointments. If the number of applicants is so large that there is great likelihood of not accommodating some of the children, the latest applicants are advised of this fact and told that they will not be called unless there is at least some possibility of admission.

Early Contacts with Preschool

The children who start to school in the fall have had varying amounts of previous contacts with the preschool labora-

tories. Many of those entering the upper age groups have already had from one to three years of attendance. Others have seen the schools in operation while accompanying their parents in taking older brothers and sisters.

Many of the parents have become well acquainted with the school and the teachers before their child actually starts to attend. This may be because they have sent older children through the laboratories or because they have become acquainted socially with members of the staff. All parents are encouraged to familiarize themselves with the school and its aims and objectives before their children enter. A descriptive bulletin given to them when they first make application is designed to be of aid in this respect.

During the week of registration the parents and children have an opportunity to become acquainted with staff members, including the supervisor, the head teacher of the group in question, some of the assistant teachers, and the school nurse. At some time during this week one or both parents of each applicant have half-hour conferences first with the supervisor and then with the head teacher of the group in which the child seems to belong. Occasionally teachers of two groups interview a parent. These conferences are held with the threefold purpose of acquainting the parents and the staff with each other, of giving an opportunity for the staff to learn the parents' hopes in regard to benefits to be derived from school, and of furthering mutual understanding and confidence. The staff make every effort to indicate to the parent that only through joint effort will the most be achieved toward the development of the child. Parents are encouraged to observe, to ask questions, and to make suggestions. Such information as they wish and need to know concerning the school program is given; cooperation is asked in aiding the staff as they try to maintain health standards, to secure pertinent home information, and to discuss with the parents their child's behavior at school.

The children do not accompany their parents to the above conferences. Instead, on the last day of the week preceding the

opening of school each applicant is brought by his mother to the school building occupied by his prospective group. Six children and their mothers are scheduled for the same time, a period of half an hour. Unless the weather makes it impossible the children play outdoors. There is no directing of their activity beyond the providing of attractive, readily available equipment. Chairs for the mothers are placed near the edge of the playground but mothers and children are free to go where they will. This experience just prior to the school year is thought to be of value to the child in that it serves as a short introduction and to the mother in that she can observe the teachers, the school environment, her own child's participation, and some of the other children and their mothers. Thereby is also facilitated observation of each child by teachers and psychologists who are concerned both with maintaining an enrollment of normal children and with becoming thoroughly familiar with each child as an individual.

Teacher-parent Conference

To her conference with the head teacher each parent brings a partially filled-out information blank, which is then completed. The blank, devised to provide information which will aid the teachers in understanding the individual child, is so constructed that it can be used in a flexible manner. Each teacher obtains the information in the way in which it will be of most value in dealing with her age group. For example, on the blank of a two-year-old child the section on toileting would be detailed, indicating the time and frequency, words used, and the amount of help the child needs. For older children this section may be merely checked if there are no unusual problems related to toileting.

Questions or problems arising during this conference are discussed briefly, inasmuch as longer conferences are arranged at a later date. It is made clear to the parents that the head teacher will be glad to have conferences with them at any time, and that she will ask to have a conference at least once each semester. Parents are also invited to visit the preschool.

Under ordinary circumstances they are discouraged from visiting during the first weeks, or until the children have become well adjusted to the school situation. It is hoped that thereafter the visit will not excite their child or interfere with his activities.

Other matters taken up in this first conference include acquainting the parents with the school schedule and suggesting how they may help the child to adjust to the school.

Parents of younger or shy children are advised not to be apprehensive concerning the children's happiness at school and to appear as matter-of-fact as possible. Too much discussion about the preschool, suggestions that the child act grown up and not cry, or verbal pictures of great fun which is to come may make the child either apprehensive and suspicious or too expectant.

The suggestion is made to parents of the three older groups that on the first few days on which they bring their children to school they should leave as promptly as possible. In exceptional cases this procedure may not be followed nor is it generally followed in First Group, since these children are not accustomed to being away from their parents and have had little experience with other children. The procedure in this respect is determined tentatively at the parent-teacher conference and depends upon the child's former experience with children and his experience and behavior when away from his mother.

Subsequent to School Attendance

The Child's Adjustment to the School Situation

In some instances children have become rather well acquainted with their teachers before starting to school. Children who are entirely new have contacts with the teacher and the school building at the time of registration. Thus, before school actually begins, the children are somewhat acquainted with both the staff and the surroundings. It is felt that even this degree of familiarity is an important factor in the child's adjustment to the new situation.

Becoming acquainted and happily orientated in a new school group is a real adjustment for any child. The teachers are aware of this and try to make it less difficult for him by letting him become acquainted with school gradually, by simplifying the schedule, by making it flexible, and by helping him to find interesting occupations with materials and with other children. In order that the teachers may give more help to individual children, and also in order to make the school less complicated and overwhelming, entrance to the three younger groups is so arranged that only a part of the group starts for the first time on any one day. About one-third of the children enrolled start on the first day, and more come on each succeeding day until on the third day Second and Third Groups have full attendance. Usually children in First Group are not all present until the second week of school. No new children start on a Friday, since only one day's attendance followed by two days at home may make adjustment unnecessarily difficult.

The Child and His Parent

Among the younger children, the experience of becoming accustomed to the absence of their parents may be a difficult one. It is doubly difficult when coupled with the new situation of the preschool. If children have already had experience in being away from their parents and have met it in a satisfactory manner, the parents do not stay at school at all on the first morning, or they may simply wait until the children have become well occupied. Other parents may be asked to stay during one or several mornings. Usually in such cases the mother sits in a corner of the room or yard and busies herself with knitting or reading. It is believed that the child is made to feel more secure because his mother is present. However, since she is giving most of her attention to something else, the situation does not encourage him to stay with her. If the child remains at his mother's side, attractive play materials are placed at a little distance from her in order to encourage him to start some activity. If he still stays near by, a teacher may

approach him asking him if he would like to play with the toys. Ordinarily the child at first busies himself with activities near his mother, but gradually he gains courage to go farther and farther away, often glancing to see if she is still there. Usually after one or two days he pays little attention to her. When this has been achieved, the mother tells him that she is going on an errand and will return shortly. If during this time he has not become disturbed, on the following day she stays at school only long enough to let him become interested in some activity. She then tells him that she is leaving and will return for him later. The teacher is careful that the mother does not stay in the school situation so long that the child will consider her as a part of it. Also she attempts to distinguish between a child crying for his parents because he is angry and wants attention and one crying because he is really apprehensive and fearful. In the former instance the child will probably cease to cry as soon as something more interesting is discovered; it would therefore be unwise for his mother to stay at school. It is the real fear response which the staff hopes to eliminate by having the parent stay in the situation until the child feels somewhat acquainted.

In all the groups, when the parents leave they tell the children that they are leaving and will return later. Under no circumstance does a parent leave without letting the child know that he is doing so; nor does he simply put the child through the door of the school and depart hastily.

Child-teacher Contacts

The teachers always attempt to show an attitude of sympathy and understanding, the attitude which a child is likely to expect of adults. Too impersonal and cold a manner or, on the other hand, a sentimental attitude is avoided.

In First Group an effort is made to have one teacher, if possible one who is already known, make most of the first contacts with a child. If a child stands about and seems to feel somewhat lost or frightened, the teacher may approach him, suggesting an activity or inviting him to go with her to

see, for instance, the yard, the playroom, or the trains. Often a child will feel more secure if the teacher takes his hand. In more extreme cases a child may become less fearful if the teacher picks him up for a few moments and then takes him to some interesting play materials and starts an activity with them, making it easy for the child to join in the play. Some children resent or are fearful of adult approach and are left alone and permitted simply to watch activities until they enter of their own accord.

As the child becomes acquainted with one teacher, he does not feel so strange in the new situation. Gradually the other teachers in the group take over some of his care. At the same time, with the help of the teachers, he is becoming more interested in the play materials and in the children. Ordinarily in a week or two he will be so busy that any dependence which may have developed in connection with one teacher disappears.

Most of the children in Second Group have already attended preschool and therefore do not feel so strange and insecure. For those who are new, the problems are not signally different from those described.

In Third Group there is a special problem of adjustment which does not exist in any of the other groups: some of the children go to bed for their afternoon naps as soon as they arrive at school. During the initial interview the teacher has asked the parent to be sure that the child understands that he is going to rest first and play afterward. The adjustment to this situation is eased by the fact that the four-year-olds rarely object to leaving their mothers. That many children are also going through the routine and going to bed is helpful.

As soon as the child arrives, the teacher shows him where to hang his wraps. When the wraps have been put away, the same teacher shows him the locker where he will keep his things. She then suggests that he go to the toilet. Afterward she accompanies him upstairs to the sleeping room, helping him to get ready to lie down. She explains that all the children are resting, that after he has rested he will come downstairs to

the toilet, have his afternoon lunch, and then be ready to play. When they enter the sleeping room she introduces him to the teacher in charge, who tells him that she will be in the room while he rests. The first teacher takes him to his bed and makes sure that he is comfortable and covered. She then goes downstairs to go through the same procedure with other children.

If a child should be somewhat concerned he may stay downstairs in order to become accustomed to the building and grounds and not rest upstairs on the first day. Usually he will want to go upstairs to rest after he realizes that many of the other children are there.

When a child arrives in Junior Primary on the first day, the head teacher greets him, then takes him to the assistant teacher, explaining who she is and that she will show him the cloakroom and help him to become acquainted with the other children. This the assistant teacher does, showing him where he can put his wraps. She may then help him to start playing with some other children or to find something he wants to look at or play with. As soon as the head teacher is free to do so, she goes quietly to the child who seems to be the least occupied and helps him to find something to do. Frequently no teacher contact is necessary during these first minutes inasmuch as familiar friends suggest occupations.

The Physical Environment

Amounts and Kinds of Equipment. Before school starts, each teacher puts in readiness the rooms and yard, keeping in mind the attractiveness of the arrangement. The equipment is so placed that activity is suggested. In all the groups the equipment is arranged in such a way that it provides for group play as well as for solitary play. It is always possible for a child to join others in social play, but he may also go to a quiet corner and find something interesting to do alone.

In the first three groups, but particularly in First Group, activities which are very difficult or dangerous and which require an unusual amount of supervision are not introduced

during the first days of school. Garden tools, carpenters' tools, and, in First Group, high climbing apparatus, paints, and clay are introduced a little later in the term. There are two reasons for this delay. In the first place, these activities require a teacher's individual attention and it is possible to supervise only a small number of children. Secondly, during the first part of the term there already exists as a necessity much teacher control in order to help the children to adjust socially and to become acquainted with routines. It is thought unwise at the same time to introduce activities which would require even more supervision and thus increase the social pressure.

Becoming Familiar with the Equipment. Soon after the children arrive at school it is important that they become acquainted with the building and its arrangement and with the equipment. With the youngest and shyest children explanations and directions are given as the need arises. Introductions of equipment and buildings serve as opportunities for easy contacts between teacher and child, but care is taken that these do not become overwhelming. Older and easily adaptable children acquaint themselves quickly and as a matter of course, once things are pointed out to them.

For the most part the children in the first three groups choose their own activities, but at times teachers help them to become busy. Some children must be assured that the playthings are for everybody to use; others need a slight suggestion such as, "What a good time the children are having in the sandbox," or "I think we can find a tricycle for you, too." Sometimes a slight rearrangement of equipment such as placing an interesting object near by will encourage a child to start play. A shy child who is not accustomed to children will often become interested in play if a teacher will start an activity with him. Frequently he will become so absorbed in his activity that the teacher is no longer needed and can withdraw from the situation. A few children are so disturbed by the new situation that these procedures will not help them. In these cases the child may simply watch the other children until he feels more at home. Too much effort on the part of a

teacher to encourage him to do things may only make him more self-conscious and embarrassed.

In all the groups the teachers are ready to help a child if necessary, to show him how to use something, to furnish more materials as they are needed, and to stand by to give encouragement if the child feels insecure.

The Child's Schedule. In all the groups, but to a greater extent at the younger ages, the schedule is simplified during the first days. Often, routines are made less complicated and children are given more help. The schedule is also made extremely flexible. A child is never forced through a routine but is permitted to watch and carry out the routine when he feels ready to do so. For example, a child not wishing to rest is permitted to sit quietly and watch the other children rest. Perhaps the next day he will sit on his bed or mat, and the following day he will rest of his own accord. Simplification of the schedule regarding play activities has already been discussed.

In First Group the children do not stay during the whole period on their first few days, for parents are asked to call for them early. As each child becomes better accustomed to the school his day is extended until after a few days he ordinarily stays for the entire morning.

The teachers make every effort to help the child to feel comfortable and secure in the school situation, for it is believed that a satisfactory or an unsatisfactory initial adjustment may influence the child's progress throughout the year or even longer.

III

Physical Care and Guidance

Health

The activities and provisions of the school in regard to health may be classified under two categories: (1) precautions and provisions necessary to the maintaining of healthy surroundings, which include steps taken to encourage appropriate behavior of the children, (2) specific aids to the parent in detecting and reporting deviations from the normal.

Inspection by the Nurse

Prior to each child's enrollment in September, at the time of registration, inquiry is made into the child's disease history to ascertain difficulties which would be of an infectious nature or which would so lower his resistance as to make his school attendance irregular.

First, Second, and Third Groups. During the fifteen minutes immediately preceding the stated opening hour of each session, each child is examined by the school nurse in the experimental building adjacent to the laboratories. This arrangement allows the nurse to examine children from all the groups at the same hour and does not permit children to enter their own buildings unless they pass inspection.

Each child's first point of call in the day is at the nurse's desk, to which he is brought by his mother or father. If no other child happens to arrive at the same time, he is inspected immediately. Otherwise, he awaits his turn. Actually, a child

seldom has to wait more than one or two minutes. The nurse, who sits in a low chair, talks to him easily but not volubly while she looks into his throat and nose with the aid of a flashlight. A tongue depressor is usually not necessary; the child soon learns to open his mouth widely and say, "Ah-h-h-h." To take off his gloves, examine the palms of his hands and his wrists, and put the gloves on again takes the nurse only a minute. She then unfastens his clothing at the neck, looks at his chest, then examines his neck as he turns around. With clothing fastened, he is ready to be taken to his own school building by his parent.

If in the course of her inspection the nurse encounters any suspicious signs, she questions the parent closely concerning his child's behavior, appearance, schedule, etc. She will send home any child who has a nasal discharge, a red or irritated throat, or a persistent cough or sneeze, and will not readmit him until these symptoms have disappeared. She does not permit a child with a rash or reddened skin to come into the group until she is sure that the irritation is not of an infectious nature.

Occasionally a child who has seemed well at the time of morning inspection develops evidences of illness later in the school day. The teacher or nurse will isolate him from the group, giving him only washable equipment, until his parents can send for him. For observing these indications of sickness during the school session the teaching staff is mainly responsible, since they are the ones for whom observation is possible. A single sneeze or cough without other symptoms is ordinarily disregarded as being of no significance while such signs as feverishness, unusual irritability, abnormal fatigue, or lack of appetite definitely have meaning to the teacher. However, at times when certain contagious diseases typically starting with a cold are of high incidence in the vicinity, especially stringent regulations are maintained. A sneezing or coughing child may not only be sent home but may be asked to remain there for two or three days until there can be assurance that no untoward symptoms will develop.

The nurse keeps in daily contact with the homes of absent children, informing the teachers of the child's condition and probable length of absence. Making her telephone calls immediately after inspection, she can usually in half an hour's time give the teachers the health records of their groups for the day. Another record, kept daily by the nurse for each child, covers absences, causes of absence, and information of interest concerning the physical condition of the child at various times. Instances of the latter are: reasons for his being sent home; any unusual physical manifestations observed by the nurse such as coughing, swollen glands, or coated tongue; progress of the child's recovery; any circumstances which might have affected his well-being for the day; visits to a physician or medical treatment of any kind.

The above precautions are not limited to the preschool children. Any teacher, experimenter, or observer who feels that he or she has an incipient cold or other infection reports to the nurse to be examined. If there is some infectious condition, exclusion from the groups results.

At no time is any child not enrolled in the preschool allowed in the group for purposes of visiting. If an adult who has a child with him wishes to visit the preschool, he is requested to make provision elsewhere for the child during the period of observation.

At the time of registration every parent is given certain general suggestions concerning steps to be taken in guarding the health and safety of the preschool children. He is asked to keep his child at home if he observes any signs of ill health; if he is in doubt he may telephone the nurse. He is to watch colds and sore throats particularly, not only because they are contagious in themselves but because they are sometimes symptomatic of other infections. Any parent who knows that his child has been exposed at home or elsewhere to any contagious disease is told that he should keep the child at home until the nurse in charge can be consulted.

Junior Primary. The children of this group, which is housed in the University elementary school building, are in the

care of the staff nurse of the University school. The inspection period occurs at some time during the first fifteen minutes of the session. The nurse's entrance to the room constitutes a signal for the children to form a line near the bay window, where she sits to examine them. The procedure is as described for the younger groups. Exclusion from school is not on so strict a basis as with the younger children in that a child with a slight nasal discharge or cough and no other indication of illness is not sent home. However, any child observed as not feeling well is immediately sent to the nurse's office, where he can rest or play quietly under the nurse's observation and from which he can be sent home if advisable. With the above exception the same precautions are taken in all groups.

A parent who over a period of two or three years has learned that any sign of illness will mean his child's exclusion from school will develop the habit of judging his child's suitability for school and will keep him home when necessary, thus obviating the necessity for a nurse's verdict.

First Aid

Minor injuries of an obviously superficial nature can be cared for at the preschool laboratories. Scratches, bruises, skinned knees, and so forth are cleaned and bandaged by the nurse if she is on duty, otherwise by some one of the staff, all of whom have received instruction in the proper care of the minor mishaps which occur in school. Whenever a child acquires more than a surface injury, the child's family is notified or, if the emergency is extreme or the parents cannot be located, the child's family physician is first called and the family immediately thereafter notified. Provision for the last-mentioned procedure is made at the time of registration and the parent's first and second choice of doctors is ascertained. In the only instances when this step has proved necessary, it has been possible for the child to be taken to the doctor's office.

In the case of all but the most trivial injuries, the head teacher gives to the supervisor on the same day a report of the

circumstances surrounding the accident, the degree of injury, and the precautions taken by the teacher.

Each building is supplied with the following first-aid equipment:

Airtight cabinet, easily cleaned, locked, out of reach of children
Sterile gauze packs (not many kept on hand at any one time; all replaced at least once a year)
Sterile bandage, ½-inch, 1-inch, 2-inch, 3 packages of each
Safety pins
Adhesive tape
Scissors
Eye dropper
Thermometer (in ethyl alcohol)
Tongue depressors
Swabs (in sterile jar)
Spirits of ammonia
Tincture merthiolate (antiseptic)
Alcohol (rubbing, cleansing)
Boric-acid solution and crystals
Vaseline
Butesin-picrate ointment (for burns)
Baking soda (for insect stings)
Needles
Tweezers
Enamel pan, sterilized and wrapped in a sterile cloth

Building Provisions

Many of the adjustments to the child's physical needs and well-being are discussed or implied in other sections (safety, buildings, equipment). A limited number should be indicated here.

In the main playrooms of all the groups, glass draft protectors have been constructed on the lower sills of windows closely approached by the children in their activities; these are of shatterproof, wired plate glass. The child's safety and health are both considered in heating provisions. In First Group exposed radiators are of the flat type, placed near the ceiling; heat pipes run under the floor to insure uniform heating. In

the building occupied by Second and Third Groups, the radiators, all of which are exposed, are boxed into heavy wire screening. Thermometers are placed in wire boxes at a distance of twelve inches above the floor in all groups so that the temperature regulation takes into account that level of air in which the child is moving. Large receptacles of water are placed as humidifying aids around the rooms or behind radiators.

Artificial illumination is provided by overhead lights in all groups. In Second and Third Groups the lighting units were planned and the installation supervised by the electrical engineering department of the University. Diffused indirect lighting of equal intensity throughout the rooms has been assured.

Floors used by the children in the three younger groups are dusted daily and scrubbed three times a week. Bathroom fixtures are scrubbed and all floors dusted during the noon hour in the building used by Second Group and Third Group and again at night after the close of Third Group session. Junior Primary floors are swept daily and washed once a week. During vacations and at other times when exposure to infection is suspected, all washable equipment is washed with a disinfecting solution. Dishes used in the laboratories are sterilized daily. Midmorning lunch dishes are boiled, noon meal dishes are run through a sterilizing rinser. Every room in the building used by Second and Third Groups is given a thorough airing with windows wide open during the noon hour.

Soft paper handkerchiefs and pliable paper hand towels are furnished for the children's use and discarded immediately thereafter. Those eating the noon meal at school are provided with facecloths and face towels which are hung on the children's individual hooks and which are changed at least twice a week.

Health Examinations

Medical. Once a year the staff pediatrician schedules a medical examination for each child. Ordinarily these occur in November and December. This examination is planned as a

service to the parents and is of a type which will discover fairly apparent deviations from the normal. It has not the thoroughness of a clinical examination in that no examinations concerning kidneys, metabolism, haemoglobin, and so forth, are made.

Appointments are arranged several days in advance so that one or oth parents may be present if they wish. Since these occur at school during school hours, the parents come to the school at the appointed time. Parents are encouraged to attend. All arrangements are in charge of the school nurse, who assists at the time of the examination. The doctor records his findings on the blank for that purpose and makes a verbal report to the parent, provided he or she is present. Otherwise, a written report is mailed. If the physician makes recommendations as a result of the examination, his function ends with these recommendations. It is the parent's responsibility to carry the matter to his own physician if he wishes to act upon the advice.

Dental. The professor of preventive dentistry in the dental college makes examinations of the children's teeth in November or December. This is done in the laboratories. His report to the supervisor lists the children needing dental work. Letters are then sent to all the parents, indicating either that the examination was made and no recommendations resulted or that the teeth need attention, the exact nature of which may be ascertained by talking to the examiner. The parents take the children to their own dentists.

Physical. Every two months, during school hours, thirty-two measurements of the child's physical development are made by a member of the staff in anthropometry. Reports of the findings as related to Iowa standards are sent to the parents.

Precautions in Regard to Contagious Diseases

Immunization against smallpox and diphtheria are advised but not required. As stated above, regulations in regard to exclusion from school are particularly strict when any child

in a group is absent with a contagious disease to which he may have exposed others. When such an exposure seems probable, the parents of children in that group are notified and given information concerning the incubation period, early symptoms, and immunization.

Any child known to have been exposed while in school or at home to a contagious disease is asked to remain out of school during the entire period when the symptoms might be developing. Since in the case of some diseases (such as chicken pox) this period does not begin immediately, the child may continue in school in the interim.

Teacher Activities in Relation to the Child's Health

These may be discussed under two categories: (1) the teacher's responsibilities in regulating the environment so that it may further the health of the child and (2) the teacher's guidance of the child in helping him to take over the responsibilities of which he is capable in regard to his own health and health habits.

The teacher not only needs to be conscious of room temperature and ventilation but must adjust these to the best advantage. She provides opportunity for a variety of outdoor play in accordance with weather and in relation to the needs of the child. The regulation of the child's clothing and protection against moisture is a constant source of care. To aid in these adjustments the parents of children in the two younger groups furnish an extra sweater and a pair of rubbers to be kept at school. Third Group children bring only an extra sweater.

Desirable attitudes toward some health matters are encouraged in all the groups. The desire to be appropriately clean, the acceptance of personal bodily cleanliness as a necessity and of clean hands as a preliminary to certain activities are encouraged in all the groups. Also common aims are the developing in the child of a willingness to cooperate in health examinations and of an understanding, within his capability, of the reasons for such examinations as well as an elimination of emotional reactions if such have already

become habitual. In the four- and five-year-old groups the children begin to accept some personal responsibility toward avoiding and spreading disease, while only in the older group does the matter of quarantine, its meaning and necessity, become a planned subject of discussion.

The following are health habits which the child will gradually acquire. (1) Washing hands after going to the toilet. In First Group many of the children need reminding throughout the year, although some become independent toward the end of the year. Second and Third Group children take over this responsibility after the first few weeks at school. Much of the toilet routine is under supervision, however, so that reminders are made occasionally. Children in Junior Primary are not regularly supervised in this routine, so that teachers find upon occasion that children need to be reminded not to slight cleanliness in this respect. (2) Keeping miscellaneous objects and hands out of mouth, nose, and ears. (3) Avoiding putting mouth or nose on dirty things or objects frequently handled. (4) Avoiding use of another's cup, spoon, towels, food, and so forth. (5) Avoiding eating food which has fallen on the floor. (6) Washing hands when they are dirty and one is about to begin a cleaner activity (such as midmorning lunch or making cookies). In all the groups the children need frequent reminding but gradually take over the responsibilities indicated. (7) In regard to wiping one's nose, in the two-year-old group the teacher usually takes the responsibility for recognizing the need but the child later carries the handkerchief to the wastebasket. Second Group children are more apt to recognize the need for a handkerchief but frequently have to be reminded to obtain it. The teacher's attitude is cooperative and matter-of-fact. Four- and five-year-old children are expected to take all responsibility. (8) The use of a handkerchief when coughing and sneezing is a habit encouraged in all groups, the degree of child responsibility developing at about the same rate as in the case of wiping the nose. (9) Knowledge or a rudimentary understanding of disease being transmitted by minute organisms,

frequently through the nose and mouth, is attempted in the two older groups.

Provisions for Safety

It is of vital importance that the environment for the preschool child be safe. To this end certain conditions are maintained and certain procedures followed and enforced.

Buildings

Many features of the buildings are particularly designed to insure safety. The windows in the Junior Primary rooms, for example, which are high above the ground, are protected by steel window guards; in the building for the youngest children there are window guards on the window which opens onto the play platform; heavy wire mesh is over the other windows near which the children play. In the buildings for First, Second, and Third Groups, there is one street door; the knob of the screen door outside each is placed well above the reach of the children. As a further precaution, at the beginning of the year, or at any time when carelessness is noted, small signs above the knob remind persons using the door to be sure that it is always latched.

All electric fans that are used in the laboratories are permanently covered with heavy wire mesh. There is no exposed wiring in any of the schoolrooms. All electrical outlets are placed high.

The floors in all buildings are washable. In spite of the fact that they have a smooth finish, they are not slippery.

In all the buildings all soap powders, cleansers, disinfectants, and medical supplies are inaccessible to the children.

Special Regulations

Regular fire drills are held in the building where the Junior Primary children are. Sometime prior to the first official fire drill in the fall the teacher talks with the children about fires. They talk about how fires start and how they are put out. Gradually the teacher brings the discussion around to the

fact that the school has been built in such a way that there is very little possibility of a fire's doing any damage. She explains that, since there are many children in the building, in case of fire it is wise and necessary for everyone, children and grown people, to leave the building as quickly as possible. The teacher tells the children that fire drills have been planned so that everyone can practice leaving the building quickly and according to a certain plan. The statement is made that a fire buzzer will sound sometime and that when it does each child must leave whatever he is doing, go to the door, and follow the teacher out of the building. The children are told not to stop to pick up or to put away anything nor to obtain their wraps. They are to walk and not to run. After these directions are as clearly understood as possible, the teacher and children practice going out of the building until the children understand what they are to do in case the fire buzzer sounds. The teacher makes every effort to arouse no fear in the children in regard to the fire drill. In spite of precautions, however, one or two children are likely to be frightened and will require special attention. Whenever a fire drill occurs, the assistant teacher brings up the rear of the line and makes sure that all the children are there. All adults doing experimental work when a fire drill occurs are required to leave the building with the teachers and children.

All the rooms of First Group are on the ground floor. There are two exits. The building used by the three- and four-year-olds has six exits on the ground floor. A fire escape from the second floor is easily accessible from the sleeping porch. Fire extinguishers in all the buildings are inspected twice a year by a University department. The daily attendance sheet is kept in a readily accessible place in each group and the teachers are advised to secure that sheet and take it with them in case of fire, so that there can be no confusion or question as to the number and names of children present at the time.

Although children arriving and leaving are accompanied by a parent or other responsible person, stop signs are placed in the street a short distance above and below the entrance to

the laboratories, so that all traffic must come to a halt before proceeding by the buildings. At the elementary school one-way traffic is maintained past the building while the children are coming or going, and no child is allowed to cross the street at the intersection in front of the building. Crossing is allowed only at the intersections one block away, and high-school students act as traffic guards at these intersections.

Since the children are frequently taken to the experimental building opposite the building for Second and Third Groups, there is a regulation that all staff members must hold the children's hands when taking them across the street.

Equipment

To insure safety outdoors, the playgrounds for the three younger groups are completely inclosed by fences, and there is a double lock on all gates to the playgrounds. The Junior Primary play platform has a railing and a hedge along the side next to the adjacent hill.

All play equipment is sturdy, solid, and built for hard wear. The packing boxes, for example, are especially made of heavy wood carefully planed and painted, with reinforced corners, so that there is no danger of breaking or splintering from the weight of the children as they climb and jump upon them.

Certain pieces of apparatus are especially designed to insure the greatest possible safety. For example, the longer ladders have heavy iron hooks at each end so that they may be firmly hooked to a support; the boards and planks have strips of wood screwed into each end to keep them from slipping. The trapezes and rings are suspended by iron chains from firmly set iron standards; the bars are screwed to prevent slipping. As a further example, the teeter-totter used by Second and Third Groups is attached to a wooden rocker, all in one piece, so that there is no danger of pinching fingers at the fulcrum. The climbing apparatus used by Second and Third Groups has extra iron rods below the wooden rungs to act as braces. The slides used by the younger groups have stairs with a railing leading to the slide and a mat at the

bottom of the incline. The slide used by the youngest children has wider steps, is lower, and is not so slippery. During the past year swings have been removed from all but First Group playgrounds. Children as active and strong as are most children of three years or more can swing so high or push an empty swing to such a distance that there is considerable danger of other children being hit and injured. Since in these playgrounds it is not feasible to keep away from the swings all children except those swinging in them, it has seemed safer to remove the swings; their value to children of this age is somewhat limited, at best.

Many paints or the coloring matter in them contain lead or other poisonous substances which may be absorbed through the skin as well as by mouth. Lead poisoning is cumulative and not immediately observable. Because young children are apt to acquire paint not only on their hands and arms but also on their faces and mouths while they are working, the paints they use should be harmless. Therefore, the paint used in the preschool laboratories is a powdered vegetable coloring free from any poisonous substance.

It is the teacher's responsibility to see that all conditions of safety are maintained. For example, she frequently makes certain that the street doors are latched; when the children go outside she makes sure that the playground gates are shut. She is constantly watchful to see that all equipment is in good condition and in working order—that wheels are in line and secure, that nails are hammered down tight, screws firm, hanging equipment solid, boxes and boards free from splinters, ropes and catches not worn thin. All broken or damaged equipment is removed or repaired immediately.

After each session a janitor inspects the yard and puts it in order. Sand is swept from the walks and any dangerous objects such as sharp sticks are removed from the grounds. All trash which may have accumulated is cleared away.

The older children learn to be aware of the possible danger from equipment in need of repair and are encouraged to report any such conditions.

Teacher Guidance for Use of Equipment

Decisions as to the danger of an activity are the responsibility of the teaching staff. The teacher is constantly alert for any situation which may be dangerous to any child. She is always near and ready to step into an emergency, quickly but calmly; yet she does not hover apprehensively about the children. In general, the youngest children are supervised more closely in all their activities than are older ones. However, within any of the groups, differences in developmental age and in the caution exercised by particular children will result in varying degrees of supervision. It may also be necessary to take special precautions at certain times. For instance, in the winter, when the children are heavily clothed and encumbered by mittens and galoshes, some of them will not be able to climb about so easily and so safely as they can when they are unhampered by their clothing.

Although the decision as to the danger of an activity is the responsibility of the teaching staff, an important objective is to teach the child what is safe and what is not safe, so that he may exert care and self-control wherever and whenever necessary. Explanations are made to the child so that he understands that some situations and activities demand caution, while others are so dangerous that they cannot be permitted. It is also made clear to the child that he needs to be careful not only of himself, but of others.

In all groups, for example, the children must learn, both because of the danger involved and because of the social undesirability of the behavior, that they must not hit and must not throw objects or dirt or sand at other children. They also learn to put down carefully objects such as shovels, garden tools, and blocks, instead of flinging them aside carelessly. The children may need to be reminded to walk when they are carrying shovels, rakes, or sticks, and to watch out for others if they are carrying long objects. If they are shoveling they need to be sure that they have plenty of room so that no other person is in danger of being hit either by the implement

or by shovelfuls of sand, dirt, or snow. The children are also taught to place rakes with the prongs down toward the ground. Sometimes it is necessary to suggest that a child find a less high place from which to jump or that he be sure no child or object is in his way.

When children are playing closely in large groups, or when several of them are playing on the same piece of apparatus, a teacher is near at hand to see that no one is in danger of being pushed off or knocked down. She reminds the children to look out for each other. She may divide the group or suggest turns so that there will be less confusion.

When riding tricycles or playing with wagons the children learn how to manipulate the vehicle so that they do not run into objects or tip over in going around corners. They learn to watch for other children as they proceed, and to be especially careful when they are backing. In playing with ladders, boxes, and boards, they learn that they must be sure such objects are securely placed; that they must be careful not to bump into others; and that they must not move a piece of equipment when another child is in it. For example, they need to learn that it is unsafe to climb a ladder when another child is coming down, and vice versa, and that one must not approach another child too closely when climbing lest one child step on another. If a child is piling the yard blocks into the wagon, the teacher may ask him if he is sure that his pile is firm and steady; she may remind him to warn others not to come too close. In Junior Primary, where there are more children per teacher and the children act more quickly and actively, they are told not to tip over the heavy packing boxes without the help of a teacher. In the other groups supervision prevents this.

In all groups the children learn that it is dangerous to knock the rings or trapeze about, since unforeseen movement may injure themselves or other children; they learn that they must be particularly careful when they are riding, walking, running, or playing near such hanging apparatus.

Certain precautions are felt necessary for the use of the slides. The children may roll certain objects such as balls or small cars down the slide providing such play does not interfere with the activity of another child, but they cannot take large objects such as shovels and sleds down with them, nor push them down. A child may climb the slide only when no one is coming down. The children learn to take turns and not to push or crowd each other either on the slide or on the approach to the slide. In the younger groups the children may go down the slide in any position, although in the beginning of the year, especially, the children are reminded to hold on and to be sure they are really ready before they start to slide down. The Junior Primary slide is larger and more slippery than the slides in the other groups; there is a slight drop at the bottom into a sandbox. It is necessary, therefore, that these children be restricted to a sitting position in going down the slide so that they may land on their feet. Precautions for the use of pieces of climbing apparatus are similar for the three- and four-year-olds: they are to be careful when climbing not to get in the way of other children or to crowd them. They may not stand on the top bar though they may sit there if they are careful. They may take some things such as pails of sand with them, but they understand the need of care not to drop objects lest other children below be hit. The three-year-old may not take boards or ladders up into the climbing apparatus, but the four-year-olds are permitted to do so, for they are surer of themselves, stronger and more adept in climbing about. However, they are reminded about placing such articles securely and firmly and are not allowed to stand on boards placed on the very top.

The three-year-olds cannot take shovels, rakes, or long sticks into the climbing apparatus with them. Sometimes the four-year-olds wish to do so and although this is permitted they are reminded to be especially careful; they are particularly closely watched whenever this is the case. In fact, play on the climbing apparatus is always closely supervised.

Sometimes the children place ladders against the fence of the playground of Second and Third Groups. They understand that they must be sure the ladder is firmly placed, and that they may sit upon a rung of the ladder with their feet placed on a lower rung. They may not climb upon the fence, however.

In this playground there is a small cherry tree with branches so low that the children are able to climb into it. The children are closely supervised when they are climbing in the tree and are reminded to proceed very carefully.

When the wading pool is in use in the summer, a limited number of children are allowed in it at one time, and these are reminded to be especially careful not to crowd one another, since it is somewhat more difficult to keep one's balance in the water. Since the tetanus bacillus is to be found in this section of the country, and lest some unnoticed sharp object be on the ground, the children do not run about the yard in their bare feet at any time. When the pool is in use the children wear their shoes to the edge of the pool, and when they come out they dry their feet immediately while sitting or standing on a long bench beside the pool. They put their shoes on before they walk on the ground.

Because the staff feels that there is danger inherent in play with toy guns or objects used to represent guns, such play is discouraged. The teacher may suggest a new activity, such as pretending that the stick is a flag, and suggest making a parade, explaining the possible danger in the gun play. She may ask the children to put the guns away. If the children bring guns from home, they may show them to the other children but are asked to leave them on a shelf or in a locker and to take them home again at the end of the session. In the five-year-old group, guns are not permitted at all; the University elementary school has a regulation expressly forbidding their presence at school.

When the children carry scissors they are instructed to carry them always at their sides with the points downward.

It is occasionally necessary to remind a child to have plenty of room for his larger block structures, and to suggest that he warn others not to approach too closely, in case the blocks fall. Perhaps the teacher may ask if the child is building it firmly or if he is sure it will stand up so that there will be no danger of the blocks falling.

When the children are working with wood and carpentry tools they are watched very closely. Certain restrictions are placed upon the use of tools. First Group children have only wood and hammers and nails. As in all groups, it is explained that each child is to hold his own nail when hammering. Quite often a child may offer to hold the nail for another child, or another child asks him to do so; this is unsafe, for the child who is holding the nail may not be able to dodge a poorly aimed blow, and the child using the hammer may hit much harder than he would if he were holding the nail himself. In Third Group the saws are kept in a locked closet so that it is impossible for a child to start sawing without the teacher's knowledge. The teacher remains in the room constantly whenever a child is using a saw. She limits the number of children working at the carpentry bench as advisable according to the activity in progress. For example, if two children are sawing, probably only one other child will be able to work at the bench, especially if he is making some fairly large object. If all the children are hammering and there are no specially large constructions, there may be room for four children. The children, too, take responsibility for looking out for others, being sure that they have plenty of room before they start to saw or hammer. Whenever a child finishes with a saw he returns it to a shelf. The teacher then puts it away.

Work with tools is also closely supervised in the Junior Primary, and certain tools, such as the plane, are used only under the strictest supervision. When using the screwdriver the children understand that both hands are to be kept on the handle. As a general precaution only one child may work with certain tools at one time.

In the building for Second and Third Group there are no wheeled toys indoors. The size and arrangement of the rooms makes this advisable, as does the fact that the older children are much more vigorous in their use of such equipment. Also, the playground is so easily accessible and consistently used that no deprivation is thought to result from this regulation. The children in Junior Primary sometimes make for themselves wagons and cars which are big enough for them to ride upon. They may make use of these toys in the schoolroom if they proceed carefully.

Excursions

When any of the First Group children go the short distances away from the group which constitute their "excursions," each teacher supervises no more than three children; these three hold someone's hand all the time. When they cross the street the teacher explains about the necessity of watching for cars and of crossing only when the road is clear in both directions. In the older groups, the teachers remind the children before they start on an excursion that they are to remain on the sidewalk and stay close to the group, also that when the group comes to an intersection everyone is to wait for the teacher and cross only if the road is clear. In Second and Third Groups the children and teachers hold hands together when crossing a street. In the two older groups the children may often walk by twos or threes or alone, although a teacher is always near. Sometimes the most responsible children may walk ahead of the teacher and the group, although not so far ahead that it is not possible for the teacher to reach them quickly. The less responsible children are divided among the several teachers, who hold their hands or at least stay beside them.

Parents are always notified if the children are to be taken on any excursion which will necessitate transportation. The parents cooperate in providing automobiles. There are always two adults in any five-passenger car so that one may sit in the

back seat with some of the children. Usually an extra teacher or an assistant accompanies a group on excursions.

General Summary

Whenever a child disregards these precautions, his attention is called to the fact and an explanation made as to why caution is necessary. If the infringement is repeated the child will learn that the privilege involved, for example, that of using the hammer or sliding on the slide, will be denied until he is ready to use the equipment or take part in the activity in a safe manner.

It cannot be too strongly emphasized that the teachers are alert to insure safety at all times. Moreover, the children are not constantly overwhelmed with a feeling of impending danger or with a host of restrictions and regulations. It is the teacher's responsibility to see that too dangerous situations are prevented from arising, and during certain activities and times and with certain children supervision is very close. It is also her concern to teach children appropriate caution and self-control. At the beginning of the year, warnings and explanations and instructions may be somewhat frequent, but the children soon learn when they need to be cautious. It may be that certain situations described in this chapter will never arise in a group; often an explanation need be made only once; some children may almost never need to be asked to refrain from a dangerous activity or to be reminded to be careful. These precautions and restrictions are merely illustrative of the provisions made and of the procedures followed if the situations should arise, in order to insure a safe environment for the preschool child.

Motor Activities and Development

One of the objectives in the preschool laboratories is to promote motor development. Toward this end materials and activities are provided to encourage the exercise of a variety of muscular coordinations.

Provisions for Outdoor Activity

Open space of itself enables children to move about freely. There is opportunity in the use of the equipment for such activity as climbing, jumping, bending, lifting, shoving, and pulling. There are ladders, stairs, boards, boxes, wagons, and climbing frames in all the groups, and a tree platform in Junior Primary. All groups have slides, rings, and trapezes and Second and Third Groups have a turning bar.

Each group has a sandbox or earth plot large enough to allow for vigorous digging and shoveling. Pans, cups, sieves, funnels, scoops, and other utensils are available for other kinds of activities. There are also rakes, trowels, spades, and other garden tools, and in winter snow shovels and sleds to promote strenuous play.

Provisions for Indoor Activity

Although the most active forms of play take place outdoors, motor development is provided for in a variety of ways indoors. In First Group there is a balcony reached by steps or ladder. Under it is a bar from which the children may hang by their hands and on which some may learn to hang by their legs or to turn somersaults. The two-year-olds have wide boards on which to jump, walk, and climb. Sometimes these are used as inclined tracks for wheeled vehicles. The children in all groups have heavy nested and hollowed boxes and building blocks which require some effort in lifting, bending, and shoving. Rhythmic and dramatic activities provide opportunity for a wide variety of active experiences; in fact, at the older ages the stimulus to active play probably should become decreasingly dependent upon the stimulation of specific "equipment."

The finer motor coordinations, as well as larger ones, are encouraged by outdoor activities, but certain equipment used for the most part indoors provides especially for the exercise and development of manual dexterity. There is opportunity

for easel painting and water coloring, for drawing, coloring, or "writing" with pencils, crayons, and chalk, working with wood, pasting and cutting, building with blocks, stringing beads, using peg boards, working with clay, and manipulating various small toys such as cars and trains.

Provisions for Individual Differences

Play involving extensive movement as well as activities in which the finer coordinations are more frequent are common to all the groups, but the equipment for stimulating them varies somewhat and is adjusted to the size and ability of the children. For example, the youngest group has a small climbing frame, the three older groups have larger ones; the youngest group uses only hammers, the older children have saws and a brace and bit, while Junior Primary children have, in addition, screwdrivers and planes. Even within the same group some of the equipment varies; there are, for example, different-sized blocks, tricycles, and boxes.

The amount of time spent on the various activities differs from group to group in accordance with the stage of development reached by the children. Most of the children in First Group, for instance, spend little time in activities which demand the more refined motor skills, while the Junior Primary children, in contrast, have more activities of this type.

Levels of motor ability vary from group to group and, within the groups, even from individual to individual. For example, while children in First Group have little control of direction when they throw a ball, five-year-old children can throw a ball some distance more or less accurately and can quite frequently catch a ball thrown to them. The oldest children, even at the beginning of the year, may be expected to be practically independent in putting on and taking off wraps; the youngest children need much more help. In general, all children are expected and encouraged to give actual physical help in carrying out various responsibilities such as transferring equipment and helping to get lunch ready, but the

amount and kind of assistance is in accordance with the skill and needs of the child.

Teacher Guidance

It is the teachers' responsibility to see that each child has a variety of experiences in motor activity of different types. Not only does she provide equipment, but she encourages a child to use it if he does not do so of his own accord. She may suggest a new activity to a child who has been restricting himself to certain forms of play. She may make certain pieces of equipment prominent by mere location in order to suggest their use. She may suggest that a child join others on a different piece of apparatus, or that they invite him to join them. While materials are usually available to the children at any time, certain ones may on occasion be made more prominent in order to stimulate interest.

The teacher also encourages the use of equipment in a variety of ways. The children themselves often display considerable originality and ingenuity, but sometimes the teacher may suggest a rearrangement in order to create new possibilities for physical exercise. She may, for example, place a ladder between two boxes, or make an incline for walking or sliding by placing a long board from a box to the ground. In First Group many of the boxes and ladders are too heavy for the children to move without help, so that it is necessary for the teacher to do most of the rearranging. Some of the suggestions, however, come from the children.

The teacher may suggest new ideas for the use of pieces of equipment. For instance, because of her suggestion, play in the sandbox may assume more active form. Children who have been sitting in the sandbox filling molds for their "bakery" become interested, perhaps, in digging roads and making bridges for the bakery's delivery truck.

Sometimes a piece of equipment may be put in an inconspicuous place or even removed altogether if it has been used too extensively or too exclusively by a child. At one time, for

example, a certain tricycle was removed "for repairs" and at another time the "doll-house room" was dismantled mainly because certain children were playing unprogressively in it for long periods of time.

It is also the teacher's responsibility to see that there is progressive development of ability where such development needs to be consciously stimulated. She observes closely so that she is aware of each child's level of accomplishment. Whenever possible she obtains objective evidence of his motor ability. She stimulates the child's interest in a variety of ways, as described above; she uses praise and encouragement discriminatingly to make the child desirous of further accomplishment, avoiding at the same time, however, making him dependent upon her or emphasizing this activity at others' expense.

At all times the teacher encourages independence in order that all the children may play freely without actual physical help. Individual differences and circumstances make a variety of procedures necessary. The teacher may stand very near or give actual physical help to a timid, hesitant, or awkward child so that he may derive both security and self-confidence. In order that a child may experience success, she may at times give suggestions or directions. If a child, for example, is discouraged by his failure to manipulate a vise successfully, or if he does not wish to swing on the trapeze because he has not learned how to balance himself in it, she may give him encouragement or help. When assistance is needed verbal suggestions and instructions are preferred to much actual physical help. If a child, for instance, wishes to climb into the trapeze and has tried unsuccessfully, the teacher suggests a new method, even giving him some assistance, rather than actually lifting him.

It is especially important that a child be protected from becoming afraid of an accident or a fall from any of the equipment. Such fear is found particularly before a new activity or after a fall or mishap. The teacher takes special

care to see that a child who has been hurt in any way regains confidence or that an inexperienced one is helped to feel security in her presence.

On the whole, the children are allowed to experiment and use the equipment in their own way within the limits of safety.

Occasionally the teacher herself joins an activity. She may sit at a table to interest some child in a more quiet occupation or to encourage some form of manual activity; she may join in a rhythmic activity or interest a shy child in a game by inviting him to be her partner; to interest the children in trying their ability to balance themselves she may start walking along a board set upon two low boxes; she may start a jumping game to suggest more active and warming play. However, if the teacher does participate in an activity her purpose is to stimulate interest and movement, not to entertain the children.

The teacher desires to discourage a child from an activity that is so strenuous or so long continued that it may become harmful. Possible examples are lifting something which is too heavy or jumping onto hard surfaces or from too great a height. Unfortunately, however, research has not yet contributed enough objective standards to aid either in judging a child's capacity under such conditions or in ascertaining undesirable types of motor activity.

Eating at School

Midmorning and Midafternoon Lunch

A midsession lunch is served daily to all the preschool groups. Its purpose is to contribute a certain amount of vitamin content to the children's diets and to provide a somewhat restful solitary or social interlude. For the three preschool groups meeting in the morning, this midmorning lunch is served at approximately ten o'clock, about halfway between the child's breakfast and lunch hours. For the two afternoon groups lunch occurs at about three o'clock.

Lunch in the three younger groups consists of a teaspoonful of cod-liver oil and a two-ounce glass full of orange or tomato juice. Second servings of juice are available for those who wish them. When oranges are most expensive, tomato juice is substituted in order to reduce the cost to the parents. The juice for all groups is prepared by the cook at the building occupied by the three- and four-year-old children and carried to First Group and Junior Primary in covered containers.

If a child is allergic to orange or tomato juice, milk or water is substituted.

Serving the Midsession Lunch. The lunch routines described in the following sections are not necessarily exclusively appropriate to the age of the children in each group. Although it would be difficult for two-year-old children to develop the skills to carry through such a routine as that of the five-year-olds, nevertheless there is not a startling difference in the intrinsic difficulty of the different routines used in the three younger groups. This fact needs no interpretation other than that in each group this routine reflects certain ideas concerning relative importance of activities and concerning time allotment. The routines are described as they are in order to illustrate a variety of possible plans and do not imply that each is the peculiarly adapted and final plan for a given age.

In the midmorning lunch routine in First Group, each child finds a place at a table. As the teacher serves a child his cod-liver oil from his spoon she holds a napkin under his chin to protect his clothing from any oil which may be spilled. Toward the end of the year, when the children can assume more responsibility, another child may be given the privilege of holding the napkins. As soon as a child has taken his oil, a glass of juice and a small paper napkin are placed in front of him. If a child requests it, he is given a second serving of juice. When he has finished he wipes his mouth, carries his empty glass to the tray on a near-by table, and drops his napkin into the wastebasket. Occasionally, when the weather is warm enough, the lunch is served outdoors.

Lunch in Second Group is usually served indoors in the dining room, although this procedure may vary when the weather permits. A short time before lunch the teacher measures cod-liver oil into small medicine glasses and pours the juice. She places the napkins, oil, and juice on the table ready for each child, or, occasionally, the children take turns in helping to set the tables. The number having lunch at the same time varies. Many activities such as music, stories, lunch, and constructive work are taken care of by dividing the children into smaller groups. At some times the entire group may lunch at once. Children may sit wherever they wish. Ordinarily the children at one table are not expected to wait for each other to start drinking. At times, however, when the children are ready almost simultaneously the teacher may casually suggest that they wait until the others at the table are seated. When each child is through he puts his glasses on the appropriate trays and drops his napkin in a wastebasket near by. Two trays are placed on the serving table, one for the cod-liver oil glasses and the second for the cups.

The afternoon lunch is served to the children in the four-year-old group at about three o'clock. Since these children have either just had a nap or are about to have one and since such a considerable proportion of their afternoon time is spent resting, this lunch period is handled briefly and quite routinely. On the serving table in the dining room are trays holding the glasses of oil, the glasses of tomato juice, and piles of paper napkins. The children who are about to rest and those who are just down from the sleeping porch go into the dining room as they are ready, drink their oil and juice standing or sitting down for a short time, and then go on to other activities.

Midmorning lunch is introduced to children in all the groups as part of the routine; if there are objections made to the oil an explanation is given that oil is taken first. In Second and Third Groups the general procedure is for the teacher to suggest to the few who object to the oil or juice that they take at least a taste. The understanding is that in a few days they

are to drink all of it. At the beginning of the year there is usually not much insistence in First Group, since the two-year-old children are having to make many adjustments and it seems important that demands be reduced to a minimum. After watching others for a few days, children who refuse at first usually take the oil and juice without insistence. However, the procedure in all the groups varies according to the individual child's behavior and previous experience.

When a child seems to have spilled his oil or juice deliberately as a means of avoiding it, the teacher usually replaces it with more. If a child persists in dawdling in spite of reminders, he must take the natural consequences—he may have less time for a succeeding activity or miss it entirely; he may have to leave his lunch unfinished in order to enter upon the next activity; he may be removed with the explanation that he must eat alone if he lets the presence of others interfere; or it may be necessary to have the child cut short a preceding activity in order to have more time for lunch. Perhaps some dietary adjustments are needed.

The children ordinarily sit down while eating, whether indoors or outdoors. Frequently a teacher may sit at a table with the children not only to help a child who is having difficulties but also to encourage courteous behavior toward each other and at the same time tend to exert a calming influence as well as to guide conversation. Any unpleasant discussions concerning the food, eating, or dislikes are discouraged.

In the five-year-old group more emphasis is placed upon the social aspect of the lunch period than in the younger groups. During the first few days of school the work of serving the juice and washing the dishes is largely assumed by the teachers, with one or two children assisting as the teacher directs them. However, each day the teacher gives more and more responsibility to the children. By the beginning of the second week, she selects two children, preferably a boy and a girl, to be housekeepers or host and hostess. At first the most capable children are chosen but in the course of a semester all have turns in this responsibility. Usually the same

children act as housekeepers for one week. On the first day in which the new housekeepers are responsible the teacher stays with them in the kitchen, offering such suggestions as are necessary to keep the cups and food clean, to avoid spilling the juice, and to expedite the routine. When a child spills juice he cleans it up. It may be necessary to excuse housekeepers from the rest period or music to prepare the tables and serve. After counting children, the housekeepers wash their hands, get out as many cups as there are children, and arrange them in rows on the serving table in the kitchen. One housekeeper selects the doilies to be used, counting out as many as are needed, the other housekeeper gets the napkins, and together they set the tables. Squares of colored construction paper are used for doilies. These are cut by the teacher rather than by children, since the daily duty of preparing doilies can more profitably be spent by the children on truly constructive activities. Several colors are available in order to give the children some choice in selecting the doilies. For napkins, regular thirteen-inch paper napkins are cut in fourths by the teacher. Occasionally, the teacher asks for volunteers to fold these napkins.

The juice is usually served on small tables in the schoolroom. From four to six children can be seated at each table, but no effort is made toward a definite seating arrangement. The position of the tables in the room varies from day to day according to the activities of the day. The children are encouraged to arrange the tables as they wish and to carry out ideas for table decoration. After the housekeepers have put the doilies and napkins on the tables, they look carefully to see if there is a chair at every place.

While the housekeepers are setting the tables, the teacher fills the cups and, if the housekeepers finish in time, they may help. The housekeepers then carry the filled cups to the tables, taking one at a time on a tray. When everything is ready and the rest period is over, the hostess announces that the lunch is ready. Each child chooses a place at one of the tables and stands behind his chair until everyone has found a place.

During the lunch period some attention is given to customary courtesies; for example, the children wait for the hostess to sit down and to start drinking. She also is the first to leave the table.

The host and hostess take the responsibility for clearing the tables. They wash each cup under running water from the faucet and put it in a kettle. The teacher washes and sterilizes the cups in boiling water.

Although the lunch period just described is fairly characteristic, situations arise which make it necessary to conserve time and shorten the lunch procedures considerably. Lunch may be served "cafeteria style," when the housekeepers may or may not help prepare the juice and each child helps himself to a cup of juice and a napkin which he carries to a convenient place.

There are many satisfactory ways of serving midmorning lunch and the manners of presenting it as mentioned in the preceding paragraphs are not necessarily ideal. Because Junior Primary children need less supervision, their lunch period varies more than do the others. In general the plans for the routines in all the groups reflect the motor skills of the children, their ability to adopt a routine, and the amount of time and relaxation thought justifiable during this school activity.

Water

In all the preschool groups the children are encouraged to develop the habit of drinking water throughout the school day. It is difficult to judge what constitutes an adequate amount of water for a preschool session since it varies with the amount of liquid which the child has at home and especially with what he takes at the meal preceding his arrival at preschool. The activity of the children and the temperature are additional factors. Therefore, no definite amount is required of each child.

In First Group at some time during the morning a tray of glasses filled with water from the faucet and therefore not too

cold is placed in an accessible place so that each child may take a drink. During the warmer weather a teacher serves the water at an earlier time in the morning and again near the end of the session.

As the children in Second Group arrive at preschool they are expected to take a drink. Children in Third Group, who go directly to bed, generally have a drink later in the afternoon. In the fall and spring, when drinks are more frequently desired, a tray is carried to the yard so that the children may obtain a drink more readily.

Junior Primary children have access to a drinking fountain located in the hall near their room. Since it is adult sized, steps are provided in order that the children may reach it. The scheduled time for bathroom routine is about nine-thirty, and it is particularly at this time that the children are expected to stop for drinks.

Sometimes the teacher may feel that a child in a hurry to get through the procedure has taken too small an amount and she may suggest that he take an additional drink. If there are some who do not get a drink, the teacher will probably call their attention to the water and suggest there is a glass for each child. Usually the fact that other children are drinking constitutes a sufficient inducement. If a child definitely refuses, his attention is called to the water at a later time. At other times during the day a teacher may advise individual children or the entire group to take water if they have been engaged in strenuous activity or if the weather is warm. At a parent's request a child may be encouraged to take a drink more frequently.

The Noon Meal

The aims to be accomplished in serving the noon meal to the children who eat it at school vary with the specific needs of each child but are all related to the ultimate aim of aiding the child nutritionally and encouraging desirable habits and attitudes in regard to food. For the child to eat food of appropriate nature in sufficient quantity to further good health

and growth and for him to enjoy eating and to do so in a manner acceptable at his stage of development are the concern of the school as well as of the home.

The planning of the meals and matters of a dietary nature are in the hands of the school dietitian. Before the children start eating at school she confers at length with each mother concerning the child's likes, dislikes, customary diet in nature and quantity, times of eating, independence in eating, and means of avoiding disliked foods. In short, she attempts to obtain any information which will be of aid to the school either in helping the child adjust to eating at school, in discovering his needs, or in providing for them. Subsequently during the semester she keeps in touch with each mother concerning the child's progress, any deviations in the eating situation or in the child's behavior, or any problems which arise. Even if the child presents no unusual problems, she confers with a mother at least once or twice a semester.

The food which is served to the children is prepared by an experienced cook under the supervision of the dietitian. Each item of food contributes to the meal as part of a well-selected menu and answers certain other qualifications: it is of good quality of its kind; it is well prepared; it is so prepared that its taste is natural, that is, it is not disguised, diluted, or mixed with another flavor; it is of a nature and consistency which does not require more chewing than the young child can and does accomplish without undue effort (in the case of meats, this usually means ground meats, except for the five-year-old children); it is of such consistency or form that the young child can manage to feed himself without undue effort; it is attractive in appearance and consistency, but is not "dressed up."

In addition, the planning and preparation of the food are consistent with the school's aim of not serving food which surpasses in elaborateness, variety, or rarity the menu of a well-equipped, well-operated home. Moreover, since one function of the school is that of developing tastes in children, there is a limit to which variety is consistent with accustoming

children to the food. Weekly menus are sent to each mother in advance of the week in which they are served.

Procedure in the Dining Room. The children eat in the dining room at small tables seating from two to four children and a teacher. The supervision of the dining room is in the hands of one of the head teachers, who confers once a week with the assistant teachers participating at the time and consults with them individually from day to day as necessary.

When the children enter the dining room, the tables are set and ready. On each table are place doilies and a center doily of oilcloth in one of four primary colors, green, red, blue, or yellow. In the center of each table is a plant or a bowl of flowers in season. At each child's place is a fresh bib or napkin. Some four-year-old children and all five-year-olds use fine, lightweight, white seersucker napkins, twenty inches square. The rest of the children use terry cloth bibs of yellow or green. Also on each doily are the children's eating utensils. These vary with the child's manipulative ability and with his home customs; the five-year-old children have knives if they can cut some of their food. An empty glass and a small pitcher of milk are at the right of the doily. On the serving table which the dietitian supervises are the covered serving dishes, extra silver, paper napkins, and sandwiches (covered by a napkin).

In serving the meal, it is the aim to make the atmosphere as serene, as natural, and as homelike as possible. The child is encouraged in taking some responsibilities in serving so that he may have an opportunity to move around and thus avoid restlessness, but in order not to cause too much activity and movement in the dining room, some serving is done by the dietitian.

All the children come to the dining room at the same time, finding their food already served for them at their places. (The food is served from covered dishes onto heated plates and quickly placed so that there is not too much opportunity for cooling.) A child usually sits in the same place at the same table for some weeks. He may occasionally be moved for a

specific reason in relation to his own or another child's needs, but a degree of stability in eating arrangements is attempted. Children of about the same degree of maturity are usually placed together, although for various reasons this plan may be changed. After reaching their places and being helped with their bibs, the younger children start eating without waiting for the others at the table to be ready. At an older table the children usually wait for each other.

The size of first servings varies with the dietary needs and with the eating habits of the individual children. For children presenting no particular problems of appetite, ability to adjust to new foods, food dislikes, or behavior, the initial servings are as nearly estimated to the child's food needs as possible. He may then have second servings if he wishes. For a child who has special food dislikes, who is motivated by second servings, or who needs to learn to finish a serving, all or part of his first plate may be smaller than his actual needs. In such cases, he may be given larger servings of other foods, he may be fed oftener, or dietary adjustments governed by professional advice are made in his whole diet over the twenty-four-hour period. It is usually possible in accordance with teaching needs to make some adjustments in kind of food served. In helping a child to widen his tastes, for instance, a small serving of a new food may be given one day and a larger one the next. A few days later this food may again be served. Because different children have different needs of this kind, a certain amount of individual preparation is involved.

When a child has finished the main part of his meal, having gone to the serving table for second servings if he wishes them, he carries his plate and used silver to a table in the butler's pantry, leaves it, and goes to the serving table for his dessert; sometimes the dessert is prepared in individual dishes, sometimes it is already served, and at other times it is of such form that the child may serve himself with guidance as to the amount. With dessert finished, a child clears his place, takes off his bib or folds his napkin once, and goes into another room.

If, in the course of a meal, a child drops a fork or spoon or spills food, the teacher may bring him another spoon, may help him clean up, or may suggest that he take care of the situation himself. Her decision needs to be made quickly and depends upon the frequency of the difficulty, the child's stage of eating on that day, her interpretation of the reason for the circumstance, and the relative advantage and disadvantage to the child and to the group of the interruption or the confusion involved.

The teacher at each table keeps a day-by-day weekly record of the food the child eats, his attitudes, any special needs, and her methods in working with him. This record is made after, not during, the meal. Decisions as to procedures with individual children are made in conference with the dietitian and the teacher in charge of the group and take into consideration not only behavior manifestations and their possible cause psychologically, but the child's health, growth, and home eating behavior and food.

School Provisions for Rest

That the child have adequate rest and that he learn to relax when rest is appropriate are objectives of the school program. A corollary to these objectives is the aim that the child's day in school shall not be fatiguing beyond the point of restoration by a normal amount of rest. Rest is defined in a broad sense as an antidote to fatigue and thus includes activities other than sleeping. There is no implication that rest at school is confined to scheduled rest or nap periods or that it is synonymous with lying or sitting quietly.

Probably the most important consideration in relation to the school's function in providing rest is the wide variation in needs from child to child and in the same child from time to time. Not only do individuals seem to differ in their needs, but home provisions for rest and home conditions and activities are of as many different kinds as there are children in a group. Moreover, some children are more readily and quickly fatigued than others. Some are fatigued by one activity, some

by another, and the values of an activity as a restorative for one child may be quite the opposite for another. It is, therefore, the teacher's function not only to provide rest opportunities but to make sure that she has taken into account individual differences in fatigability, rest needs at school, and the child's ability to relax in different situations. In so doing, her concern is not only that the child have the rest to answer his present needs but that, if these needs seem abnormally great or his ability to take advantage of rest opportunities seems inadequate, steps toward improving these circumstances be taken.

In each preschool laboratory, the day's program reflects the teacher's awareness not only that the sum total of the day's schedule should supply opportunity for the rest needed by the average child but that the activities within that schedule be so distributed and guided that they are not too fatiguing for the group or for individuals. Accordingly, in each morning session, a fifteen- or twenty-minute rest period is regularly included. Since the four-year-old children are in school only in the afternoon and afternoon naps are generally recommended for children of this age, a nap period of an hour and three-quarters is regularly included in the program for this group. These rest periods are discussed subsequently.

Concerning school provisions other than the rest period it is possible to speak only generally, since activities affect children differently and since frequently the fatiguing properties of a situation exist more in its duration, intensity, direction, social nature, or juxtaposition with other activities than in the nature of the activity itself. Also, fatigue may be the result of too little activity or stimulation. In judging the stimulating nature of an activity, the teacher judges in terms of the specific situation. She observes its effect through the behavior of the children. If they have become restless, easily distracted, irritable, hyperactive, or loud-voiced, she may have allowed the situation to become fatiguing. Probably earlier steps to turn to another activity at the first signs of fatigue would have been preferable. Avoiding the continuation of

strongly stimulating activities to the point of fatiguing the child or the group is one method of control. Suggestive of such stimulating situations are those in which children are physically very active, those in which several children are participating, those in which a child is exerting considerable effort, those in which he is intensely interested, those having a high emotional tone, those in which physical inactivity has lasted long enough for the child to crave activity, or those in which considerable supervision is involved. Methods of control may consist in appropriate change from one activity to another, the balancing of a physically active occupation by one involving less movement, or the giving to individual children of opportunities for more restful occupation. Signs of fatigue vary considerably, but a teacher may soon discover characteristic manifestations in a child. Irritability, highly pitched voice, paleness, flushing, excitability, talkativeness, hyperactivity, and inactivity are variously symptomatic, and, as signs of fatigue, call for the teacher's skill in putting the child in a situation the effect of which will be restful.

It is as important to aid a child in taking advantage of rest opportunities as to provide these. Although research is needed to indicate ways of evaluating relaxing qualities of situations and the degree of rest obtained under varying conditions, it seems fairly clear that it should be helpful to a child to learn how to relax physically. That a child is lying quietly need not indicate relaxation; on the contrary, it may mean extreme muscular tension. Therefore, since it is the teacher's aim to secure relaxation, she takes steps to help the child achieve it.

Usually the teacher works toward this end in two ways: she tries to make the situation in which the rest is taking place as conducive to relaxation as possible, and she aids the child to relax as well as attempts to teach him how to relax without help.

The surroundings are made as free from noise and movement as possible in order to suggest quiet rather than activity; rooms are darkened; low voices are used; thought is given to the location of individual children. At the present time,

Second Group and Junior Primary rest on rugs on the floor; First Group uses cots set up for the rest period in its playroom; Third Group naps in the sleeping room. Since windows are provided with draft protectors and heat is regulated by thermometers near the floor level, some of the undesirable features of floor rest are guarded against. There is probably real question concerning the relative value of rest in a playroom versus rest in a room with which the child does not associate considerable activity. Also at least questionable in part may be the restful effect of the necessary confusion of setting up and taking down fifteen or twenty cots in a playroom in the course of half an hour. In fact, the recuperative value of school rest periods needs considerable study. Unfortunately, many nursery schools have little choice concerning spatial arrangements during rest.

There are many ways in which the teacher helps a child to relax. With some younger children, particularly, the nearness of a teacher is helpful, as is an occasional calming touch of the hand or the tucking in of the blanket. A change of position will sometimes aid a child in settling down; in a case of extreme restlessness, for a child to walk across the room and back for some reason may accomplish the desired end. In the oldest group, it occasionally speeds relaxation after a stimulating activity for the teacher to call attention verbally to the few children who first relax. It is possible by the end of the child's third year, usually, to begin teaching him something about relaxing by showing him what it means. Various methods are helpful, all of which are directed toward making him feel the difference between tension and relaxation. If he first tenses certain muscles, clenches his fists, pushes his foot away from him as far as he can, or kicks hard in the air, then lets the limb drop or gradually loosens it, he may eventually get the feeling of limpness. The teacher may suggest that he act like a rag doll, or may pick up an ankle, a knee, or a wrist to test muscular relaxation.

During times other than the rest period, a teacher may suggest relaxation for any child if she thinks it advisable; she

is particularly watchful of hyperexcitable children. Reminding a child that he need not hurry or that he is working too hard may be calming. More indirect means are also employed toward the same end. She may talk to him a few minutes, quietly, to give him an opportunity to rest; she may see that he has some time alone or is with only one or two children. She may actually suggest a short rest; she may pick him up and hold him for a few minutes. Under all such circumstances, she tries to anticipate fatigue and does not wait until the child has "gone to pieces" before acting.

School Rest Periods

Regular Relaxation Period. The two-year-old children rest at approximately ten-thirty for fifteen or twenty minutes. Small, folding, canvas cots are set up and each is covered with a small rug. Each child has his own marked rug and small, light blanket. An adult arranges the cots while the children are having lunch. As each child finishes his lunch he goes to his cot and lies down. A teacher covers him.

The group is divided between the playroom and another small room in which there is space for three cots. If all or almost all of the group is in attendance and the playroom seems too crowded, one or two children rest in the hall. Early in the year the children placed in the small room may be those who have difficulty resting in a large group; later three of the best resters may be permitted to rest in this room with only occasional supervision. After rest is over those who wish to do so may help fold their rugs and blankets. However, this assistance is not expected of them.

The rest period for the Second Group usually comes at about eleven o'clock, but it may vary somewhat, depending upon the schedule for the morning or upon signs of fatigue exhibited by the children. The children are provided with rugs marked with tags duplicating the pictures used on the children's cups and their hooks in the locker room. Although no blankets are supplied, they are occasionally brought from home.

The shades are drawn before the children enter a room to rest. Rugs are arranged on the floor by the teacher, the children helping if they wish to do so. There is no fixed arrangement for the rugs.

Generally the group is divided into three sections so that there are about six or seven children resting in the same room. The groupings may be changed from time to time, especially if the combinations do not seem to make for a relaxed rest or if one child becomes too dependent upon the teacher supervising the particular group. When rest is over, the children fold their rugs so that the side which comes in contact with the floor is always on the outside. As the year progresses, the children are expected to take more responsibility in seeing that rugs are folded neatly and piled one on top of the other.

The rest period in Junior Primary is approximately fifteen minutes in length. The time of relaxation for the morning group is usually near ten-thirty, while the afternoon group has its rest about two o'clock. At the conference with parents preceding the opening of school, each parent is asked to provide his child with a small washable rug, either a rag rug or a bath mat, on which the child may rest. As much as possible the children are allowed to select their own places on the floor of the regular schoolroom. Occasionally when some child does not rest well near another, when some one chooses too cramped a place or one with too little ventilation, the teacher may suggest that he find a better location, and she may designate the place where he is to be.

On the first day of school, just before the rest period, the teacher calls the children together in an informal group. By questioning and offering suggestions she encourages them to discuss the desirability of having rest and the best means of taking it. For the most part the children make their own rules or plans for rest. They try out various ways of unfolding, folding, or rolling the rugs efficiently. When the rest period is ended each rug is folded, end to end, upon the floor, or some other way which will keep the clean side folded in and the side next to the floor folded on the outside.

Those children who stay for the noon meal rest in beds in the sleeping room at eleven-thirty. Children from First Group who come for lunch in the building occupied by three- and four-year-olds have a second rest before lunch. Occasionally it seems advisable for a child who is enrolled in the four-year group to come early enough to have a rest before lunch is served. The children do not remove their shoes but cotton covers are fastened over them to protect the beds. This rest period lasts about twenty-five minutes.

The Afternoon Nap—Third Group. Since Third Group children attend preschool in the afternoon, provision is made for them to have their naps at school. The sleeping room upstairs is equipped with Simmons cots, each of which is supplied with a thick mattress protected by rubber sheeting and covered with a sheet, one thickness of woolen blanket, and two thicknesses of a larger cotton blanket. The beds are arranged in two rows along the length of the sleeping room with an aisle between, and three beds are placed in an alcove. Muslin curtains the length of the beds and three feet high stretched on rods and suspended from the ceiling by means of pulleys and ropes are hung between the beds at a height so that their lower edges fall just below the mattress level. Thus the children cannot see each other but air circulates freely. The sleeping room has dark-green shades with rollers at the bottom so that the shades will not blow out over the beds. When the children go into the room they find the window shades drawn and each bed in readiness with the covering folded back.

The twenty-four children enrolled in the four-year-old group arrive at school at one o'clock. Although for some years it has been the custom for the entire group to nap from one until approximately quarter to three, half of the present group rest at that time and the remainder are on the sleeping porch from three until about four-thirty. This arrangement seems more satisfactorily to provide for variations in sleeping time in the group, as well as for maturity differences in other respects.

Immediately upon arrival at school each child who naps in the first group takes off his outdoor wraps in the coatroom, goes to the toilet, and quietly goes upstairs and to his own bed. The teacher helps him remove his shoes and assumes the responsibility of keeping the child covered as the temperature requires. The children who rest in the second group go upstairs singly or with one other child at about three o'clock. Children who are the more tired or need the longer naps are sent first.

That the children do not remove more of their clothing for the nap is due to the limited time of their school day and a consideration of the relative values of time allotment within it. These children are in school for four hours in the afternoon, one hour and three-quarters of which are spent in resting. To remove clothing and redress would consume a larger fraction of the remaining time than could be justified by the ensuing values. Needless to say, were the children in school over an all-day session a readjustment of routines would be seriously considered.

In general, the children are to rest quietly for at least an hour. Adjustments are made in consideration of sleeping hours at home and in light of the child's morning fatigue. A child who has not slept and who is restless will usually get up after that time. Most of the children awaken about two-thirty or four-thirty. If a child is still sleeping soundly at quarter to three or quarter to five, the teacher, in deciding whether to call him, considers his customary sleep needs, his behavior on that day, any unusual conditions, and his hour of going to bed. Parents frequently request that a child sleep no longer than a stated time.

It sometimes happens that a child who goes to sleep easily if he rests alone is unable to adjust quickly when in a room with other children. If it seems unwise for him to miss a few naps during the period of adjustment, his bed may be placed alone in a small room downstairs. However, this policy is followed only in some cases. It is the aim of the school to have each child be able to relax without help, and the average

child quickly learns how to rest quietly. A majority of these four-year-old children sleep every day. A few sleep only once or twice a week, and the rest fall in between these two groups.

Elimination

Toilet Provisions

In the building for the two-year-old children there are two lavatories and two small toilets in the toilet room. Mirrors hang above the low basins, containers for paper towels are within reach of the children, and wastebaskets are near by. On high shelves there are baskets for the children's extra clothing. Close to the toilets is a bulletin board for the toilet records.

For the three- and four-year-olds there are two toilet rooms, each containing two toilets and two lavatories and mirrors. An opening in the wall between the two rooms makes possible the supervision of both by one teacher. In each toilet room one toilet is slightly smaller than the other, but all are of a size suitable for children. In each room there is a container holding paper towels and a wastebasket. There is a toilet in a small room opening from the sleeping porch.

The towel racks and hooks for the washcloths, used by children who remain for the noon meal, are arranged on rods in each toilet room. An open cupboard along the walls of an adjoining hall contains wire baskets for the three-year-old children's supply of extra clothing.

Junior Primary children use the boys' and girls' toilet rooms provided for the first two grades of the University elementary school.

Schedule

One of the requirements for entrance into First Group is that the toilet habits of the child be fairly well established. This is not considered to be the case if he persistently and regularly has accidents. The school is not sufficiently staffed to assume responsibility for establishing toilet habits.

At the first interview with the parents of the two-year-old child the teacher obtains information concerning the toilet procedure of each child, the terms with which he is familiar, and the schedule which he has followed in the home. During the first few weeks, the teacher takes each child to the toilet at stated intervals. If accidents occur, the time is noted on a chart and on the succeeding day a change is made in the schedule to correspond more nearly with the time of the accident of the preceding day. In general, the schedule varies with the needs of the individual children. However, as the year progresses, a schedule appropriate for the group as a whole can be established.

In Second Group at approximately ten o'clock, just preceding the midmorning lunch period, all children are expected to go to the bathroom.

All children in Third Group go to the toilet when they arrive at school and at three o'clock when they awaken from their naps or are just starting for the sleeping porch.

A toilet period for the children in Junior Primary is scheduled at approximately nine-thirty in the morning and at one-thirty in the afternoon.

In some few instances a particular child may have scheduled times in addition to regular group routine. In all groups a child may go to the toilet when necessary and without asking permission. On occasion, such as when getting ready for an excursion, an additional period may be added for the group.

Parents are notified either in person or by note if the child has a bowel movement at school. This does not occur with great frequency since parents are advised to take care of this at home. They in turn give the teachers information pertaining to variations in the child's elimination in the home.

Supervision and Guidance

Certain general principles prevail in the toileting procedure for all the groups. The boys are reminded to raise and lower the toilet seat. Each child is to flush the toilet after use and is expected to wash or rinse his hands.

When the two-year-old child enters preschool, he is not expected to take responsibility for his toilet needs. A child who has been accustomed to doing so at home, however, usually takes this responsibility at school. In speaking of the toilet to each child, the teacher at first mentions the terminology which the child has known at home but at the same time mentions the expression of "going to the toilet." During the early weeks the teacher assumes much of the responsibility in seeing that the child gets to the toilet and in helping him with his clothing. Later he is encouraged to assume more responsibility for himself, although usually a teacher is present in the bathroom when children are using it.

In the three-year-old group it is assumed that the children will be somewhat more independent than the two-year-olds. They are expected to take some responsibility for indicating their toilet needs as well as for using the toilet without accident to clothing or floor. In general, the three-year-olds have to be reminded to flush the toilet after use. The children are still rather closely supervised during the bathroom routine.

The children in the two younger groups are required to have a complete set of extra clothing available. Soiled clothes are rinsed and sent home with the child.

Children in Third Group are supervised closely at the beginning of the year, but this supervision tends to decrease as the children become increasingly dependable. However, there may always be one or two children who need more guidance than others. The teacher looks into the toilet rooms occasionally to see that all goes smoothly during the routines. It is the understanding that each child in Third Group will be responsible for going to the toilet when he needs to, although the teacher is alert in order to remind the child if he seems to be neglecting his needs. It does not seem necessary for four-year-olds to have a change of clothing at school.

In Junior Primary the toilet situation is quite different from that in other groups. The toilets used by these children are also used by the first and second grades, and boys and girls do not use the same toilet room.

The aim for the child is cooperation in this routine, ultimate independence, and a matter-of-fact attitude. Although this is one situation in which a dependent child may develop self-reliance, nevertheless it is not too strongly depended upon as a teaching device for this purpose. Other situations are equally or more appropriate. The aim of complete independence involves knowing when he needs to go to the toilet, going by himself without asking the teacher, managing his clothes, flushing the toilet, washing his hands afterward, using the toilet effectively in the presence of other children or adults without embarrassment, using proper terms, and, for boys, learning to stand when urinating. The accomplishment of many of these aims is dependent upon the kind of clothing which the child is wearing and the ease with which he can manipulate his clothing.

In First Group about one-third of the children are completely independent at the end of the year, others indicate their needs but require help, and some not only need help but must be reminded. In spite of the supervision of the teacher there still may be some occasional accidents. Even though habits have been established, there may be lapses due to the strangeness of the situation or adjustments to be made in the group.

Occasionally in Second and Third Groups children may need actual help in managing their clothes or in learning how to manage them alone.

Special Problems in Regard to Toileting

If there are accidents, the teacher treats such occurrences matter-of-factly. There is a problem in the older groups of protecting the child from the interest, scorn, or derision of the other children. The teacher by her attitude tries to show the child and others that she is not upset but regards it as "just an accident." Any discussion is tacitly discouraged. Accidents in the upper groups seldom occur. If a child does not come up to the customary standards of self-control, the matter is taken up carefully to discover the possible causes.

It is a rather common occurrence for any child of preschool age to have toilet accidents at the beginning of the school year, even though control may have been established for some time. Usually these accidents are caused by tension due to the many new situations encountered and, if handled casually, the situation takes care of itself. Great care is taken by the teacher to avoid adding to the tension by either the child's or the parent's concern over the happening.

From time to time, there are children who have difficulty in learning to go to the toilet in a new situation. The procedure varies with the teacher's interpretations of the underlying cause of behavior, whether it be comparative recency of acquiring control, habit, attitude in the home, or dependence on the parents. The general principle followed is that of making the child as comfortable and unconcerned as possible, respecting his feelings, and trying to take care of the matter through gradual rather than sudden change. The mother may be asked to help her child in the school toilet. If the child is embarrassed by the presence of others, arrangements are made for him to use the bathroom alone at first. Under such circumstances, he usually becomes accustomed to the ordinary routine and gradually seems to lose his former attitude.

When out-of-the-ordinary situations arise, such as a child's going to the toilet outdoors or evidencing an unwholesome attitude about this routine, the teacher's whole demeanor is one of naturalness, matter-of-factness, and unconcern. In the former instance, she usually indicates to the child that bathrooms are provided for his use. In the latter, she has to make a decision between overlooking the behavior, believing it is a thing of the moment not to be emphasized by attention, or making a matter-of-fact reply, then turning the interest of the children. In the case of the child originally responsible for the inception of this behavior she tries to work with the underlying causes.

IV

Encouraging the Child's Intellectual Development: the General Environment

It is not feasible to describe all the materials, all the activities, or all the situations which stimulate the child intellectually, nor can all the methods utilized be covered. They are not constant in any group from year to year, from day to day, or from child to child. Since this is true, to select a few examples of actual situations and procedures without indicating how they express and reflect a definite program of objectives would be to imply that these procedures are invariably appropriate and are objectives in themselves. Moreover, individual differences within a group are as significant as gross differences due to chronological age. Therefore, the educational objectives are stated, provisions for these are outlined as they are appropriate for all ages or within various gross developmental levels, and actual procedures are described as illustrative both of day-to-day activities and of the working out of the principles stated.

Aims in Guiding the Child's Intellectual Development

It seems unnecessary to justify the belief that a child's intellectual development should be encouraged. It may be stated

only briefly that a child who during his preschool years becomes comparatively well informed and who enjoys some intellectual interests will, other things being equal, make more of his opportunities subsequently. In addition, broad and absorbing interests do much to eliminate undesirable types of behavior, which are nurtured by too meager an environment.

The characteristics, habits, or attitudes stated below are considered as objectives related to the child's intellectual development. As they are stated, they express the ultimate aim for the individual rather than the different levels or stages which are reached at certain ages. The expression of the latter would be preferable but they have not as yet been contributed through controlled study. Each teacher attempts to influence the school environment and its provisions so that attention is directed toward all objectives and so that each child may develop at least somewhat nearer the ultimate goal than the level indicated by his present characteristic behavior.

It is desirable for an individual:

1. To have an interest in the world in which he is living and in contacts with it. In the child, this may be indicated by thoughtful questions, a variety of interests, alertness to change, investigativeness, and interest in reliving experiences.
2. To be interested in acquiring and to have a background of information and experiences with his environment.
3. To be independent in thinking. In the child, this may be indicated, for example, by the fact that he has ideas and can use them, that he plans activities, that he contributes to the ideas of the group, that he correlates thoughts and experiences.
4. To be resourceful and imaginative.
5. To have a constructive and progressively developing interest in some activities in which he can follow through ideas of his own.
6. To have critical ability, that is, the ability to recognize good ideas of others and to evaluate superior and inferior products and activities of his own and of others.
7. To have the ability to profit by experience, explanation, direction, and suggestion.

8. To make active and adequate use of his capacities.
9. To safeguard his intellectual capacities or activities from disturbance by emotional considerations or influences.

The point of view as a whole concerning these objectives maintains that it is more important to stimulate intellectual attitudes at this age than to acquire facts. For a child to be interested in his environment, in acquiring information, and in thinking independently is of greater concern to the teacher than that he perform feats of memory or be a compendium of facts. Actually, however, the acquiring of intellectual attitudes and the use of factual material are so interrelated that it is impossible to work toward the former without utilizing the latter and this fact the nursery-school teacher must recognize. A child will not become interested in his environment unless his exploration of it gives him satisfaction; he will not become increasingly independent in his thinking if the act of thinking is not satisfying to him. One important method of assuring this satisfaction is to give the child plenty of stimulating material and appropriate guidance in its use. He needs to achieve goals which are recognizable to him, both because progressive accomplishment means development for him and because accomplishment stimulates and satisfies the child.

Individual differences among children reveal themselves in every way and, in adjusting to individual needs, the child's intellectual behavior is considered rather than his chronological age alone. Children differ greatly in their interests; it is not necessary or even desirable that every child in a school group be interested in every activity. It is essential that a child have a number and variety of interests which he can pursue. It cannot be said that one kind of experience will invariably develop any one kind of behavior; moreover, one experience will contribute in many ways to the child's whole development. The teacher's concern is that she consider each child's needs and manipulate the environmental provisions accordingly; adequate school materials, sufficient time, the children's interest, all these are significant. It should

follow that a teacher has a flexible program which utilizes both spontaneously arising environmental opportunities and the interests of the children. She keeps in mind the fact that children are interested in new experiences but that they also enjoy and profit by reviewing experiences and reliving former ones. She attempts to be flexible in the best sense of the word. Her program is adjustable but not to such an extent that it reflects lack of decision and planning on her part or too much dependence on chance to determine the day's activities.

The child learns many facts and acquires a considerable background of information through his preschool experiences, and it is one of the teacher's chief objectives and responsibilities to help the child to make constructive use of these facts by encouraging sound habits of thinking. This cannot be confined to any particular and predetermined time. Nor can the teacher choose one aim and plan to work on that for a week and on another aim the following week. She can be, however, and is constantly alert to seize any opportunity which will further attainment of the objectives for intellectual development. Also she can enlarge the opportunities offered.

The majority of her opportunities, then, will arise spontaneously and without warning. She must be constantly prepared to take advantage of them.

There is, of course, no objective test to show to any measurable extent just how effectively these aims are accomplished. It is not expected that these will develop from the teacher's guidance in a single or even several experiences. But it is hoped that each experience will contribute to optimum intellectual development so that, after a number of such experiences, the child will be nearer the attainment of the objectives.

First Group, Tommy, Age Two Years, Three Months

The children are getting up from their midmorning rest and going outdoors to play. Tommy opens the screen door leading out to the play yard, wanting to fix it so that it will stay open. He puts a chair against it but on the wrong side. The door still closes when he lets go of it. He moves the chair into many different positions

but always keeps it on the wrong side of the door. Each time he sees that the results are unsatisfactory and tries again. Finally he puts the chair on the other side of the door. It holds the door open.

* * *

During this time the teacher was across the room from Tommy, apparently occupied otherwise. She offered him no help, wanting him to solve the problem alone. Had he grown discouraged and started to leave she would have given him some encouragement, at the same time directing his attention back to his problem.

First Group, George, Age Two Years, Eight Months

Some of the children are standing on chairs watching the disk of the victrola whirl around while a record is playing. A small chair is standing near the piano, six or seven feet away from the victrola. George stands upon the chair and tries to see the victrola disk, but cannot do so from this distance. He moves the chair even a little farther away from the victrola and tries again.

"George, I will help you to carry the chair over to the victrola so that you may see," offers Miss Fales, taking hold of the chair. But George objects strenuously and places the chair in another position far away from the victrola and stands on it. A little later he begins to grow impatient with the problem. The teacher again suggests, "Here is a place for the chair, George. If you put it here, you can see." She indicates a place near the victrola. George carries his chair over, stands on it, and watches the victrola.

* * *

The teacher wanted to help George with his problem to some extent. A less direct suggestion, such as, "Why can't you see from this chair?" would have meant nothing to him. He needed more direct help. After this time he did not repeat the mistake.

First Group, Bob, Age Two Years, Ten Months; Jimmie, Age Two Years, Eight Months

Bob and Jimmie are rocking vigorously on the rocking boat. The momentum of the activity makes the rocking boat gradually move across the floor until it starts to hit a chair as it rocks back and forth. "Look, look," wails Bob to one of the teachers.

"What do you think is wrong with it? What should you do?" she asks.

Staying on the rocking boat, Bob pushes with his feet and makes it swing around so that it no longer hits the chair, but is so close to the table that Jimmie is apt to be bumped. Bob is perfectly satisfied with this and starts to rock again.

"It still is not in a good place, Bob. I think it must be moved farther away," the teacher says. "Jimmie might be bumped."

Bob again begins to push with his feet, but the rocking boat is too heavy to move in this way. "What would be the best way to move the rocking boat, Bob?" Bob continues to push with his feet to no avail. "The rocking boat is too heavy to move that way. If you and Jimmie get off, I think you can move it. If you can't, I will help." The two children get off and push the boat toward the center of the room. It proves to be rather heavy and the teacher helps. "That is the right way to move things. Now it is in a good place. There is plenty of room and it will not bump anything."

* * *

In this situation the teacher tried to encourage the children, particularly Bob, the more mature of the two, to solve the problem independently. She encouraged them by asking what was wrong and what should be done. She also encouraged them to try to take care of the difficulty rather than simply to call for help.

First Group, George, Age Two Years, Nine Months

George has just been helped to take off his wraps. He is very eager to hang up the snow suit himself and he picks it up, takes it by the belt buckle, and presses the buckle firmly against the end of the hook. However, as he removes his hand, the snowsuit does not stay against the hook as he apparently expected, but falls to the floor. He tries this several times, each time pressing the belt buckle against the hook and then cautiously relaxing his pressure and finding that it does not stick. He continues trying the same procedure again and again even though it does not work. The teacher says, "It does not stay, does it? Try some other way." However, George tries to push other parts of the snowsuit against the hook and finds that they do not stick.

"Put it way up high over the top. Way up on top," the teacher suggests. George tries to do this but each time does not lift the

suit quite high enough for it to go over the hook. He begins to get rather tired in his attempt, and as he lifts the suit up to try again (just missing the hook), the teacher takes hold of it and pushes it over. "That is the way it goes. Up high," remarks the teacher. The next day George hangs his snow suit without help.

* * *

In this situation George probably learned some definite things about the relationship between a snowsuit and a hook when the snowsuit is being hung up. He also was encouraged to be persistent in solving a problem, and he had practice in following verbal directions. The teacher finally helped him to solve the problem because he was getting tired.

First Group, Robert, Age Two Years, Nine Months

Robert puts two wagons and a Buddy L truck end to end to make a train. He wants to fasten the vehicles together and asks for some rope. The teacher brings him two pieces. He takes them and tries to fasten two vehicles together by simply putting the rope from one to another and hanging it over the handle of one and over the axle of the other, without tying them. Then he tries to pull the "train," but the vehicles come apart. He starts again with the same results and begins to fuss and to become tense and excited. Knowing that Robert cannot tie a knot the teacher says to him, "See, Robert, the rope must be tied. I will make a knot." Then she ties the knot slowly, showing him how she does it and how it makes the rope stay fast. "Now we must make another knot so that this end of the rope will hold the other wagon tightly." She again shows him the process. When the three vehicles are firmly tied together Robert tries to see if they will stay together when he pulls the front wagon. He loads his "train" with garden tools and a variety of miscellaneous objects. Then he tries to pull the train, but it is too heavy. He is at a loss to know what should be done and is becoming impatient and losing interest in the activity. "Robert, the train is too heavy. Perhaps if you take some of the freight out of it you can pull it," remarks the teacher. However, he objects to removing any of the contents of the wagon. "Perhaps Billie will push while you pull. Two people can make it go more easily than one." This suggestion is accepted, and several children start to

help Robert with his train. They enter into the spirit of the play, some of them being brakemen, some pushing, and some taking turns riding. They "go to Cedar Rapids," unload freight and then continue the trip "to Des Moines." The other children gradually lose interest and leave the activity, but since Robert wants to continue and cannot do so alone, one of the teachers enters into the play. During this activity she brings in a few simple words and concepts related to trains. She remarks that some trains carry mainly passengers, while others carry freight; she says that on passenger trains when a person takes long trips he can eat and sleep on the train. This train activity lasts for some time and it finally becomes apparent that Robert is growing hot and tired, although he is still much interested in what he is doing. Train books are brought into the yard, and Robert and some of the other children sit on rugs in the shade to look at pictures. They talk about trains. The teacher shows the children pictures of freight trains and of passenger trains. She shows a picture of people eating in the dining car and of a Pullman made up for the night saying only that this is where people sleep on the train.

On the following day Robert again arranges the wagons and the Buddy L truck together and asks for ropes. He arranges the ropes and asks the teacher to tie them, remembering that they do not hold without knots. He asks some of the other children to join his activity and to help him to push. This train play of Robert's lasts over a period of several days. From day to day it is apparent that he is learning things about trains and the handling of the materials which he is using.

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Comments. This is an unusually extensive experience of this kind for a two-year-old child. Actually, he was nearer three than two and the activity took place in First Group in the latter part of the school year. The train activity furnished a number of intellectual experiences which probably contributed something toward the development of all the intellectual aims which are discussed above.

Interest in the world and in contacts with it was encouraged throughout the play. Robert had initiated a play upon the basis of an already established interest, but since he was encouraged and helped to carry out the activity in a satisfactory manner, and since the experience was progressively enriched by added information and explanation, the interest may have been increased.

His background of information was increased in a number of respects. He learned some facts about trains, but he also learned something of physical relationships. In order to fasten two objects together with a rope, the rope must be tied so that it does not slip from the object. Vehicles which are loaded with objects are heavier than those which are empty. Several children working together can make a heavy vehicle go when one child cannot do so. It is difficult to pull the train up the incline because it slips back, but in going down, it goes so fast that it is dangerous unless the teacher helps to hold it back.

Not only was the background of information increased, but perhaps this experience did something toward encouraging Robert to like to gain new information and to seek it out. As he gained information, he appeared to be more interested in his play.

Throughout this activity Robert was encouraged to be independent in his thinking. He wanted to make a train by fastening the vehicles together. This was an original idea, as it had not been done before in the group. When he asked for a rope, it was furnished, and the teacher helped him to tie the wagons and truck together so that he would gain satisfaction from having made his own plan. During the play Robert continued to make his own plans, and the group of children who joined him followed many of his suggestions.

His resourcefulness and imagination were frequently shown and the teacher encouraged them by making it possible for him to continue with his play by entering into the dramatic play situation with him after the other children had lost interest. She was watchful, however, to guide his play into other channels when signs of tension began.

Robert was undoubtedly encouraged to have a field of interest and to be attentive and interested in following through his ideas. It is true that some interest was the basis for his starting the play, but his interest was probably increased and made to continue over a period of time by added information and explanation and the cooperation of the teacher to make the play a success. Without the aid of the teacher, his interest might have been lost at a number of points—when he did not have a rope, when he did not succeed in fastening the vehicles together even after he had been given a rope, when he found the wagons too heavy to pull alone, when the other children lost interest and left the activity, and when he became very fatigued. The teacher's cooperation helped him to stay interested beyond all these points.

The ability to follow verbal directions was exercised at various times throughout the train activity. The teacher offered verbal suggestions when the situation seemed to demand them, and helped Robert and the other children to understand how to carry them through. For example, "Pull harder and it will go. See, pull like this." "If you don't make such a sharp turn, it won't tip over. Go around the corner slowly." "It is too heavy with so many children. If only one child rides at a time, it will go." "Put the shovels down carefully. Don't throw them; they might hit somebody."

The ability to profit by experience and explanation was also exercised. Robert was given some explanations regarding things which he would have learned slowly by experience, but only when ignorance showed signs of interfering unduly with his activity. However, he learned from experience also and as his activity progressed, it was evident that he was acting in the light of the activities which had preceded. He learned how to handle the wagons more effectively. He learned that the rope must be tied to hold the vehicles together, that ordinarily passengers do not ride on freight trains, but there are special trains for them, and that they can eat and sleep on the trains if they wish. Occasionally the teacher encouraged Robert to use experience and past explanation to more advantage, as for example, "Robert, do you remember what happened yesterday when you took the train down the incline? What did you do?" "Why do you think the train is stuck?" or "What made the train tip over?"

During the train activity careful precautions were taken so that Robert would gradually learn to carry through his activities without being hampered by emotional factors. He is an excitable child who sets goals well over his abilities, and frequently becomes much upset when he fails in carrying them out. For this reason the teacher tried to show him that, rather than scream and yell when he could not accomplish something, he should try to find a solution for his problem. At times he came to a point in his play where he felt frustrated owing to his inability in carrying through his ideas. Sometimes he was encouraged with such suggestions as "try hard," "look to see what is wrong," "try a little more," or "I think you can do it." When it was evident that he could not solve his difficulty, the teacher gave him a little help, but then encouraged him to finish solving the problem. On other occasions she made opportunity for a temporary change of activity. She was careful not to eliminate the

problem entirely by solving it for Robert without his help and cooperation.

The adequate use of Robert's capacities was encouraged in the same way. He was encouraged to work at the problem rather than to fuss about it. The teacher also tried to help him to limit his goals by actuality rather than to let them be determined by his wishes. Robert is in the habit of trying impossible things, such as taking a wagon up a ladder, and then becomes very excited and unhappy because he cannot accomplish his wish. Throughout the train activity, the teacher tried to help him to see that there were some things that he could not do no matter how hard he tried. She tried to help him to learn that some of these activities could be accomplished if children or an adult helped him, and that for some there were substitutes which were almost as satisfactory.

Third Group

Martha is talking about her approaching birthday. "I am going to have a party and I am going to invite the *whole world.*" "Why," answers Esther in amazement, "if you invite the whole world, the Singing Lady will be there." "No, she won't either," shouts David. "She won't be there, will she, Miss Dawe?" "Well," answers the teacher, "if the whole world really came she would, because then everybody would be there. Everyone we know and everyone we ever heard about would be there if the whole world came." Then David asks, "Would Pop-Eye in the funny paper be there and the Katzenjammer Kids, too?" Miss Dawe turns this question back to David. "Are they real, live people?" "No, they are just pictures." "That's right. Then they would not be there, for they are not real people." "But all the Chinese people and all the Eskimos and all the Dutch people would be there," says Esther. "Well," says Martha, "that's too many people. I guess I won't invite the whole world."

Third Group

Tommy is making a paper airplane. It is all finished except that he wants to attach a string to the nose of the plane so that he can pull it through the air after him. He has tried to puncture a hole in the end of the plane but the scissors which he is using have torn through the end of the paper. Tommy makes a second airplane and when that tears too, he flings the scissors down on the table, tears up the paper, and starts to throw the pieces on the floor. At the

same time, he begins to cry and shouts, "This old paper is no good. It always tears. It's no good. It spoiled my airplane."

The teacher at this point steps in. Several possibilities are open to her. She can tell Tommy that he cannot use the paper if he tears it and throws it around. Tommy perhaps would learn not to throw paper on the floor. Or she can tell him that it is not pleasant to hear him crying and fussing and suggest that he find something to do where he would be more pleasant. Either of these would avoid the real issue. Tommy would probably still blame the paper, and Tommy's project would be abandoned in the face of difficulty in spite of the fact that the important issue here is to help him solve the problem for himself instead of discarding it after becoming emotionally upset.

The teacher first tries to encourage Tommy to restore calm. "I think we can find a way to fix it very easily, Tommy. Let's try again. I'm sure you can have it all done in just a little while." Tommy stops crying, but says again, "The paper is no good." This time the teacher says, "It really isn't the paper's fault, Tommy. That isn't the real trouble. The real reason is that you are tearing the paper with your scissors." Now Tommy complains, "It's those old scissors. They are no good." The teacher then, to give him a hint, continues, "I think those scissors are all right for some things but you have chosen the wrong kind this time. You don't want to make such a big hole, do you?" "No, I want to make a little hole." "That's right. There is the trouble. You didn't think about that before you started, did you? What can you do to make a smaller hole?"

Now Tommy sees the relationship. He sees what is needed and quickly goes to get a pair of pointed scissors in place of the blunt ones he has been using. As Tommy continues to work, the teacher says, "Now, you will be able to do what you wanted to do. It didn't help to cry and fuss, but it did help when you thought about what the real trouble was."

* * *

In this way the teacher has tried to help Tommy to see that crying and becoming upset is a futile form of behavior. She was not too direct in her disapproval of Tommy's behavior, for he was upset and all ready to give up, so she gave him a hint as to how he could make a smaller

hole. But she did point out that the paper and scissors were not to blame. The next time Tommy may be more likely to think of what he himself can do instead of letting an emotional state prevent the application of his capacities.

Third Group

Several of the children are playing train. Robert says to the teacher, "When does the train go to Denver?" The teacher answers, "Well, I don't know, but I think I know how we can find out. Do you know how people find out when the trains go?" Robert suggests, "I think maybe they ask the man in the station." "That's right. They do. And how do you suppose the ticket agent knows?" Robert answers, "I don't know. Maybe he just knows." "No, he can't remember when all the trains go, but he looks it up in a timetable and that tells when the train leaves Iowa City and when it gets to Denver. I have some timetables that the ticket agent in the station gave me. Let's go look it up." Several of the children go with the teacher and she finds the timetable, pointing out where the names of the towns are and showing the children that the numbers tell the time when the train goes. She gives the timetable to the children and for several days they play train, "looking up trains" and towns, and calling out the time. Some of them can read figures and they proudly offer to be conductors.

Third Group

Janet and Elinor are playing on the teeter-totter and have started to call each other names, such as "You big elephant," "You old cross bear," "You crazy chicken," and so on. The teacher comes nearer and says, "I can think of some animals that you haven't named. How about a giraffe or a rhinoceros? Can you think of some other animals?" Soon Janet and Elinor are thinking up the names of different animals, each trying to name one that the other has not mentioned. During the game several times the teacher remarks, for example, "But a banana is not an animal." The children thus have to keep in mind what class of names they are using. Later, as their supply of animal names seems exhausted, the teacher suggests that they think of all the flowers they can.

* * *

This game, which the teacher has introduced as a substitute for an inappropriate contest which might easily have

ended in a quarrel, requires considerable mental effort. It has now a determining purpose, calls upon past experience, and entails the application of critical ability in rejecting those names which do not belong to the proper class. Merely to have diverted the children's attention or to have stopped the name calling by an admonition about socially acceptable behavior would not have stimulated the children to use their memory and powers of discrimination.

Third Group

Ann is playing with some marbles. She picks up one of clear glass and says, "Look, you can see through this one." The teacher answers, "Yes, it is transparent. Transparent means that you can see right through it. Are any of the other marbles transparent?" Ann tries them all, but only the one is clear. The teacher continues, "None of the other marbles is transparent, but perhaps you can see something else in the room that is transparent." After looking around, Ann says, "You can see through the windows and through the aquarium, too. I guess they are all transparent." The teacher answers, "Yes, you can see through all of them, so we say they are transparent."

* * *

The teacher has used a new word and explained its meaning to Ann by example and has encouraged her to make a generalization by discovering similarities.

Third Group

Eugene is eating his dessert at the noon meal and remarks, "I suppose the dessert is the caboose because it comes last." The teacher laughs appreciatively. "That's an interesting idea, Eugene. Actually, the caboose usually comes last on a freight train. But we use the word caboose for the car on the train that carries the workmen and crew. Usually it is the last car, but not always. Dessert is usually the last course in a meal. Today we had two courses. Meat and potatoes and carrots were the first course and dessert is the last course."

Third Group

Joan is working with the wood, making a boat. She comes to the teacher and says, "I want it to be a sailboat. Will you make the sail

for me? I don't know how to make a sailboat." "Where could you go to find out how to make one, Joan?" "Maybe it tells how in a book, but I can't read, so you tell me." The teacher then suggests that perhaps pictures of sailboats would help even more, and brings several pictures of different kinds of sailboats. She leaves Joan so that she may decide which kind she wishes to make. No further suggestions are made. Joan first chooses a square-rigger but decides that her piece of wood is not big enough and finally selects a boat with a single sail. The teacher fastens the picture over the workbench and lets Joan work out her own method. In the process of learning to copy from a model, Joan has to try several times before she is able to make her boat look like the one in the picture. The teacher lets her find out by experience that a large nail will split a small piece of wood, while a tack is big enough to fasten the sail to the mast; that a tack is not long enough to go through the boat and up into the mast. Joan has to search through the supply of nails, comparing sizes and measuring the length of several nails in order to find the most suitable one. While Joan is making the sail, the teacher explains to her that the sail is shaped like a triangle and points out that some of the blocks are the same shape.

Third Group

Buddy is about to climb up a ladder to the top of the jungle gym, when the teacher notices that only one side of the ladder is on the ground and that it is about to slide sideways. She goes to Buddy quickly before he gets both feet off the ground and says, "Have you fixed the ladder so that you are ready to climb up safely?" "Oh, yes, it's O.K.," answers Buddy and starts again. "But is it firm and steady, Buddy?" "No, I guess it isn't, but I'll fix it when I get up to the top." "But, Buddy, think a minute. First, what will happen while you are on your way up to fix it?" Then Buddy sees the difficulty, laughs as he fixes the ladder, and says, "I sure would have tumbled down hard." The teacher waits to be sure the ladder is firm and points out, "You see, it's a good idea to look ahead before you start, so that you can be sure you can do what you want to do."

* * *

If the teacher had merely said, "Buddy, get down and straighten the ladder before you start to climb," the child would have been called upon only to follow a simple direc-

tion. He might not have even seen why the ladder needed to be straightened. Here the teacher's first question attempted to have Buddy plan his activity ahead, to profit by experience, and to use his judgment, but was not successful. Then she gave a hint, but Buddy reasoned incorrectly. Next she directed his attention to the core of the problem, but still did not solve it for him. He still had, independently, to correlate the elements in the problem and apply them for the solution. Buddy saw the danger of acting impulsively and the teacher reminded him of the need for planning activities. Buddy solved his own problem through profiting by suggestions.

Third Group

Ralph and Bobby are building a playhouse. They have joined boards together to make a floor and are ready to start the wall. Bobby starts to fasten the boards onto the floor so that the long way of the board is vertical to the floor. Ralph says the boards should go the other way and, after some argument, they come and ask the teacher which way the boards should go. Instead of giving them the information directly, the teacher suggests, "You can find out for yourself. One way would be to look at a real house and see which way the boards go." There are several clapboard houses in the neighborhood, so after a tour about the preschool playground, the two boys are agreed and they go back to work, putting the boards on like clapboards. Thus they have been encouraged to seek information for themselves and to find out by observation and comparison.

Third Group

Janet says, "I came down first and Martha came down last and Robert came down last." The teacher says, "Janet came first and Martha came second and Robert came third, and Robert was the last." As another child enters, Janet says, "Now Ann is last but what else is she?" The teacher answers, "Ann is fourth," and she repeats the names, counting with each name, first, second, third, fourth, and last. The "game" is continued, Janet correctly enumerating until eight children have come down, and each time she says, "Now Tommy is sixth and the last," and so on. She has grasped the relation between a person's number and the fact that he ceases to be last as long as children keep coming, for when there

are no more she says, "Marie was the eighth and really the last one." The next day she plays the same game and correctly says, "I am the third and the last until someone else comes, then they are fourth and the last."

Third Group

Jane approaches the teacher and asks her to get a paintbrush. Instead of going after the paintbrush, the teacher gives Jane an opportunity to satisfy her need by making a conclusion and by using her memory and previous experience. "The paintbrushes are left with all the painting supplies, Jane." "But I don't know where they are." Since Jane seems unable to remember, the teacher still does not go and get the brush for her, but takes advantage now of an opportunity to have Jane follow some fairly involved directions. "Listen carefully and I'll tell you how to find them. First, you go into the room where we have lunch. Then you look behind the door and you will see a white chest with doors and drawers. Open the right-hand door (touching the child's right hand) and you will see the brushes. Remember, in the lunch room, behind the door, in the white chest on the right-hand side." Jane follows the directions and finds the brush. Then in a few minutes, another child asks for a brush. The teacher this time asks Jane to tell Marie where the brushes are. At first, Jane says, "I'll go get it for you," but the teacher wants Marie to learn how to follow directions, too, and wants Jane to be able to give directions accurately, so she says, "You can tell her how to find them, Jane. You remember how I told you." Jane then repeats the directions well enough so that Marie is able to find a brush.

* * *

Thus both Jane and Marie have to pay attention, to hold a series of ideas in mind, and are more independent than if the teacher had performed the task for them. Jane, in addition, has the further experience of either having to remember the directions clearly enough so that she can repeat them or working out her own correctly and in proper sequence.

Junior Primary

On a day during the Ohio River flood, the children began to talk about the flood upon their arrival at school. At first only three

or four children were engaged in the discussion. After talking together seriously for a few minutes, each child adding his bit of information, the conversation took on an argumentative tone, and the children's voices grew increasingly louder. Finally, in desperation, Jack said emphatically, "That couldn't be! You just ask Miss Stormes and see." Deciding that this was the opportune moment to enter into the situation, Miss Stormes went toward the group where Jack asked her, in a loud voice, "Could it be, Miss Stormes?"

"I don't know just what the question is," replied Miss Stormes. As three or four of the children started excitedly to explain their problem to her, other children joined the group and Miss Stormes said quietly, "You are all talking at once. Consequently I can't tell what any one says. Let's sit down here and talk it over quietly. Perhaps we can understand it better then."

Miss Stormes waited until the children were seated and quiet. Then she said, "Jack, will you explain to me what you were trying to tell me a few minutes ago?"

"Well, Henry said that 'everybody just had to swim around and around and airplanes would just drop their food down to them.' And the food would get all wet, wouldn't it, Miss Stormes?"

"What do you think, Henry?" she asked.

"Well, I think it would. But that's the way they do, 'cause I heard them say so over the radio," declared Henry with emphasis.

"Have you ever seen the Iowa River when it was flooding the country?" asked Miss Stormes.

"Yes," replied the children.

"How did it look?" she questioned further.

Finally Miss Stormes and the group of children evolved the following facts about the river at flood stage:

The water is very dirty. It is muddy. It has germs and filth in it.
The water flows very fast. The current is swift.
The water carries away trees, sheds, and all sorts of things it can tear loose.
The floodwater is dangerous.
People could not swim in it long. They would have to be rescued.
If airplanes dropped food down into the water, the current would carry it away. The food would be spoiled.

The children finally came to the conclusion that Henry's idea might be wrong.

During the discussion the children made many grammatical errors. Some of these were corrected by other children. The teacher suggested some corrections, and some errors were ignored, because the important point for the discussion was the clarification of ideas. When Jane said, "It busted all their houses," Catharine reminded her, "You should have said 'broke'." Frank said, "There was a piano bustin' around all the pipes and the people pushed it right out the door and before they could get the door locked it had floaten right back." "We say floated back," suggested Miss Stormes. "And one place the levee bust and an old man and woman had to take their things but they left a cow," continued Frank.

Toward the end of the conversation, Miss Stormes said, "Many interesting things are happening now because of the flood. How can we find out what is happening?"

"By the radio, we find out," suggested Kenneth.

"Read the newspaper," proffered Amy. "Only we can't read," said George. "Well, your father or your mother could read it to you," Amy retorted.

"I saw pictures in our newspaper," said Jack.

"Yeah, pictures is a good idea," this from Dan.

"I think so, too," agreed Miss Stormes. "Suppose we bring to school all the pictures that we can about the flood. And then we will try to find out what is really happening."

Three folding screens with panels suitable for bulletin boards are available. These and a supply of thumbtacks were placed conveniently for the children's use. The six panels made it possible for several children to put up pictures at the same time.

The next morning the children brought many pictures. As each brought his pictures to the teacher, she commented favorably on the fact that he had remembered to bring them and suggested that he put them on his shelf until he had removed his wraps. Wraps came off and were taken care of faster than usual.

As the children tacked up the pictures they compared them and carried on animated conversation about the flood. After all the children had arrived and all the pictures were displayed, Miss Stormes sat down near the screen and was soon surrounded by a group of children.

Several began telling her about their pictures. "Just one child at a time, please," she suggested. "Henry, will you tell us about one of your pictures? Choose the one that you think is the most interesting."

After Henry talked, Frank was asked to talk about one of his pictures that was different from Henry's.

It was not possible on this occasion to talk about all the pictures. However, Miss Stormes tried to give each child who needed this type of experience an opportunity to talk. She also encouraged the children to select a picture that had not been talked about. The discussion lasted only so long as the children were interested.

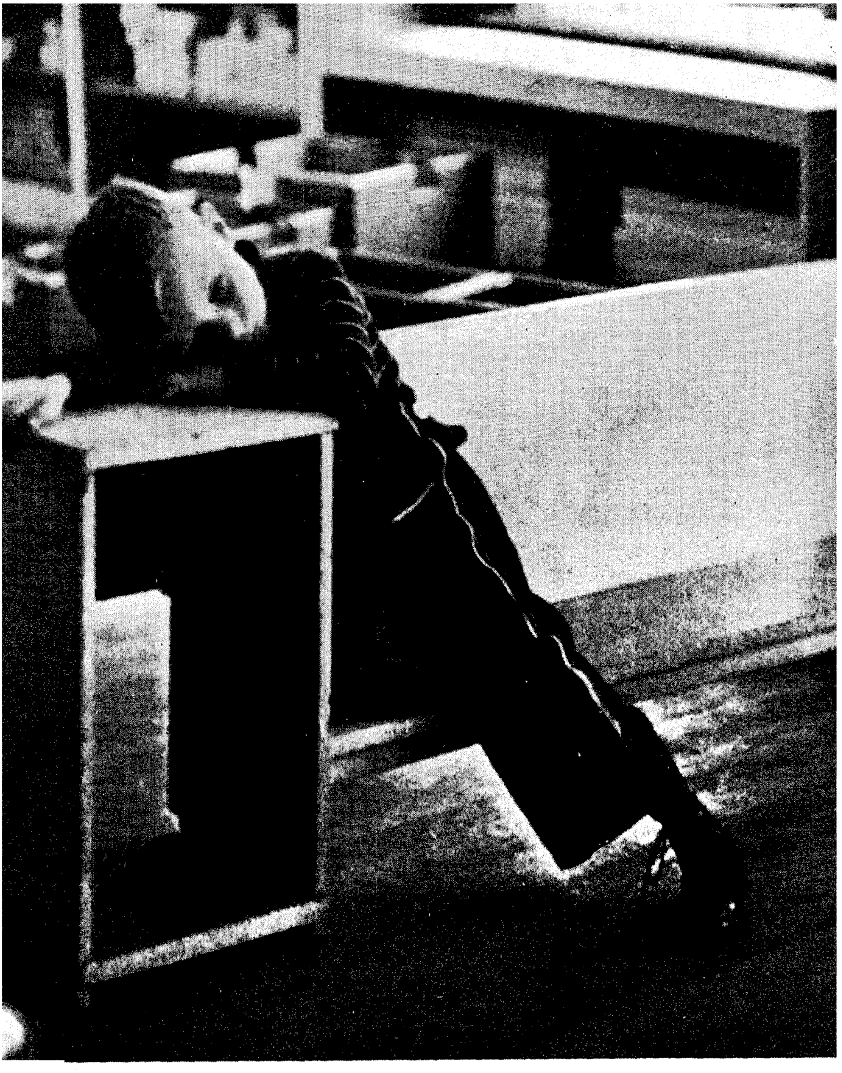
Amy suggested that it would be a good idea to make a scrapbook, and at the close of the period the children selected the pictures which they thought were most interesting to include in it.

For several days the children collected pictures and talked about them. Often during the conversation some child would tell what he had heard over the radio or what his parents had told him. During these discussions, Miss Stormes called attention to particularly good "stories" told by the children. Whenever it seemed advisable, she suggested the right word to use or a better way to express an idea.

Some of the ideas which grew out of the discussions were:

It is impossible to control this flood.
The water rises and spreads over the lowlands.
When the houses, towns, and cities, railroad yards, or farms are in the lowlands near the water, the river spreads over them.
Many people have to leave their homes and most of their furniture.
Some people are able to take a few things with them.
Some families are able to move all their things.
There are not enough houses for all the people to move into.
There are not enough trucks to move all the families.
Sometimes the water rises so rapidly that people do not have time to move all their belongings out of their homes.
Some people have to be taken away from their homes in boats.
Most of the people who have to leave their homes have to be taken care of. These people are called "refugees."
The refugees live in school buildings, churches, or other big buildings.
Some refugees are being taken to other towns which are not flooded.
Many families have to live together.
Sometimes tents are put up for people to live in. They have tent cities.





Many people are without money to buy what they need.
Many stores are flooded so that people who have money cannot buy.
There is no school.
Railroad yards are flooded so that trains cannot move.
Factories are closed so that the people cannot work to earn money.
Floodwater has stopped the machinery so that towns are without lights, telephones, gas, and drinking water.
Sewers are clogged up.
Water coming through faucets is not suitable for drinking.
Drinking water has to be boiled.
Some drinking water is brought in tanks and trucks from other towns.
Food has to be taken to the refugees.
Many homes and buildings are being washed away and many more are being damaged so that they can never be used again.
People's furniture, bedding, and supplies are being destroyed.
People are getting sick.
Some diseases, like "flu" and typhoid fever, spread and make other people sick. This is an epidemic.
Doctors, nurses, and medicine are needed.
People are being vaccinated so that they will not get some diseases.
It takes a great deal of money to provide all the things the refugees and other people in the flood districts need.
Much of this money comes from the Red Cross.
People in Iowa City and all over the country give money to the Red Cross.

During one of the discussions Diana said, "I heard a man ask the people to send money for the Red Cross."

"So did I," came from two or three other children.

"Yes," replied Miss Stormes, "and I know that all the children in the University elementary school are going to have a chance to give money to the Red Cross. Each grade is going to plan some way to get money."

* * *

Since it is impossible to give verbatim all the conversation carried on to develop the problem of how the Junior Pri-

mary children could make money to give to the Red Cross, only the questions used by the teacher as leads are recorded here, together with some of the children's answers or remarks.

TEACHER: "Who does the work for the Red Cross?"

GROUP: "Doctors." "Nurses." "Truck drivers." "Lots of people." "Yes, and people with boats."

TEACHER: "Where does the Red Cross get the money to pay for the supplies, food, clothing, medicine, or other things the people need?"

GROUP: "My daddy paid some." "Mother went to a party and gave some money. She played cards. It was a card party." "My mother gave some money down at the bank and I gave my whole week's allowance to the Red Cross. Ten cents." "I heard a man ask for money over the radio." "Everybody gives money." "Maybe I can give some money. I'll ask my daddy."

TEACHER: "How could we, here in Junior Primary, get money to give to the Red Cross?"

GROUP: "I have some at home." "I could ask my daddy." "I have a hundred million dollars in my bank." "Oh, I have a whole bankful." "We could earn it."

TEACHER: "How could we earn money?"

GROUP: "We could work." "I think we could get money for making the playhouse. We could sell it to next year's children." "We could shovel snow off the walks." "I helped put some wood in a house last fall and the lady called me over and gave me some pennies." "We could put ashes on the sidewalks and earn some money."

TEACHER: "What do people make to sell?"

GROUP: "My mother buys dresses from a lady." "Last year there was a little girl that came to our house and sold vegetables." "Sometimes my mother buys pies." "Cookies, cakes, and doughnuts." "Sometimes people sell candy."

TEACHER: "Do you think you could make popcorn balls?"

GROUP: "Yes." "We could sell them." "We could sell them across the street." "We could give them to the Red Cross." "The Red Cross doesn't want popcorn balls. They want money."

TEACHER: "To whom could we sell the popcorn balls?"

GROUP: "Advertise it in the paper and in the window so everybody would know it." "Maybe we could go downtown and sell them." "The teachers and the children would want to buy them."

Teacher: "How could we let the teachers and children know that we will sell popcorn balls?"

Group: "We could tell them." "Write them a letter." "Tell them just like in newspapers."

Teacher: "How do children in other grades tell us about things?"

Group: "Come and tell us." "Write us a letter." "Put up signs in the hall."

The conclusions reached by the group were:

The group would give some money to the Red Cross.
The children and teachers would make popcorn balls, which they would sell to the children and teachers in the school.
The group would make signs to put up in the halls to advertise the popcorn balls.

The next matter discussed with the children was, "How are popcorn balls made?" Since no child in the group knew how, it was decided they needed a recipe. Miss Stormes suggested that she had a good one. She had printed the recipe on a large sheet of paper so that the children could see the words easily. She tacked the recipe on the bulletin board and read it to the children.

POPCORN BALLS

1 Large pan of popped corn; remove the unpopped kernels; butter and salt the corn
1 Cupful of sorghum
1 Cupful of sugar
¼ Cupful of water
Mix the sorghum, sugar, and water together.

Boil them slowly until a few drops of the hot sirup form a firm ball when dropped in a cup of cold water.
Pour the hot sirup over the popcorn, slowly.
Stir the sirup evenly through the popcorn.
When the sirup cools slightly, mold in balls.
Keep the hands moist with cold water while making the balls.

The materials needed and where to get them were then discussed. It was finally decided that certain children should each bring one-half cupful of butter and the other children would each bring two cupfuls of sugar. One child volunteered to bring an electric popper.

Miss Stormes said she would order the shelled popcorn and sorghum from the grocery store and the group could pay for these out of the receipts from the sale.

Other problems which were discussed and the decisions reached by the children and the teacher were as follows:

When shall we make the balls?

On Thursday, February 18, before school is out at noon and again in the afternoon before school closes.

How much shall we charge?

Five cents each for good-sized balls.

How shall we sell them?

We shall send an order blank to each grade and ask that grade to write the number of balls they want on it and return it to us. Then we can fill the order and deliver the right number of balls to each grade. They can pay us when we deliver them.

We can sell popcorn balls in the store to teachers and other adults who want to come and buy them.

What shall we do to keep the balls clean?

Wrap each ball in a paper napkin.

What utensils or other equipment do we need?

2 Corn poppers
*2 Large dishpans for popped corn
*1 Small saucepan in which to melt butter
*1 Large saucepan in which to boil sirup

* These items are part of the school equipment

*2 Measuring cups—one for sugar, one for sirup
*1 Tablespoon to stir sirup
*1 Long-handled spoon to mix sirup through the corn
*A couple of extra bowls and pans
Clean market baskets or bushel baskets in which to deliver the balls
*Clean wrapping paper to put in baskets and cover tables
Large, clean paper sacks to put balls in when people want several balls
*2 or 3 holders
*Several tea towels
*Stove
*Cash register in the play store
*Paper napkins

Where shall we get the things we need that are not at school?

Certain children and the teacher volunteered to bring these items.

How is change made?

Pieces of real money, a penny, a nickel, a dime, a quarter, a half dollar, and a dollar bill were provided by Miss Stormes and the children were given the opportunity to handle them and have practice in making change. The children counted by fives, and as far as possible the change was made with nickels. Only a few children were really able to make change but Miss Stormes tried to emphasize with each child that two nickels were the same as a dime and if some one paid for a ball with a dime he should receive in return a nickel or five cents in change.

What can the group do toward making the balls?

We can pop the corn.
We can take out the unpopped kernels.
We can measure the sugar and sirup.
We can mold the balls.
We can wrap the balls.
We can count them.

How shall we decide what each child is to do?

Children can take turns at the different jobs.
We can have a committee for each job.
The committees can take turns.

* These items are part of the school equipment.

What are some of the things we need to do to keep the popcorn balls clean?

Come to school with clean clothes, clean hands, and clean fingernails.

Wear clean aprons.

Wash hands before handling utensils and food.

Keep hands off dirty objects when working with food.

Handle food as little as possible.

What can we do when we are not working on a committee?

Keep out of the way of those who are working.

Watch the others work.

Look at books, draw, talk to other children, or play quietly.

Be ready to work as soon as there is a chance.

During one discussion period the children decided what they wanted to say on the advertisements which were later put up in the halls. Miss Stormes printed the words and individual children drew on them illustrations of people eating popcorn balls. Kenneth, who was able to print well, made a sign for the store. He decided what he wanted to put on the sign but asked the teacher how to spell the words. He selected a picture from the newspaper to illustrate his sign.

Probably the discussions and plans as they have been given here suggest sufficiently what happened on the day the popcorn balls were made and sold. Although Miss Stormes and the assistant teacher were in charge, the children were given the opportunity to do everything they could. Some children were capable of doing more than others, but each child was encouraged to do what he could. Since it was necessary that the teachers be where the popcorn balls were being made, the "storekeepers" were left for the most part by themselves to count balls, sell them, take in the money, and make the right change. The demand for popcorn balls far exceeded the supply that the children could make and in order to "help out" the teachers made several extra batches with which the children did not assist.

The next day the children and Miss Stormes counted the money. Previously most of the children had learned to distinguish the different pieces of money. Many of the children had learned that one hundred pennies make one dollar, twenty nickels make one dollar, ten dimes make one dollar, four quarters make one dollar,

and two half dollars make one dollar. The children first put all the pennies together, all the nickels together, all the dimes, all the quarters, and all the half dollars. Next they counted out the pennies, putting each one hundred into a separate pile of one dollar. They then counted the nickels, dimes, quarters, and half dollars into one-dollar piles. It was then very easy to count the piles of one-dollar amounts in order to find out how many dollars there were. Miss Stormes helped the children in counting the remaining money, which amounted to less than one dollar.

The teacher figured for the children the amount of the bill for popcorn, sorghum, and sacks. She deducted it from the total receipts and told the children how much had been made. The children then took the money into the school office and asked the school secretary to keep it in the safe until they called for it.

Plans were then made to take the money to the Iowa City Red Cross headquarters. Since the children had previously been on excursions, they discussed what they needed to do when going on an excursion. Following are the contributions:

Come to school dressed to take a long walk
Tell our parents where we are going
Tell them when we are going
Keep on the right side of the walk
Stop at corners, look both ways, and cross the street when it is safe
Obey traffic lights
Keep hands off things
Be thoughtful of other people
Keep on the walk

The Red Cross headquarters are in the courthouse. Mrs. Forsythe, the executive secretary, invited the children to come in. Jack, who had been selected by the group to do so, gave the box of money to her. Mrs. Forsythe talked with the children, asking them questions, listening to their answers, answering their questions, and telling them interesting things about her office and work.

One of the first questions asked by one of the children was, "Where are the Red Crosses?" Mrs. Forsythe replied by showing them the one on the door and said, "Here is the only Red Cross we need; just one to show which room is ours." Dorothy noticed a stove. Mrs. Forsythe explained that the Red Cross headquarters

had been in the Legion Building, where they had had a beautiful office. "But do you remember what happened to that building?" she asked.

"It burned," said several children

"And then we just had to have an office, so the Board of Supervisors let us use this kitchen here in the courthouse," she explained

The children sat around on the floor and visited while Mrs. Forsythe counted the money. Then she wrote a receipt and after pasting a large red cross on it she handed it to the child who had given her the money. After looking around the courthouse the children returned to the school.

Provisions of the Environment and Teacher Guidance

In describing the provisions made for intellectual development, the discussion falls rather easily into two large divisions. The first includes general equipment and materials which are used in a wide variety of ways. In the second are those situations and provisions which are classifiable under special and definite categories, such as books and pictures, nature study and social studies.

General Equipment

The mere existence of a group of children together in surroundings planned for their interest and convenience affords a certain amount of stimulation even without much guidance. It furnishes much more if thoughtfully utilized. The nature of the schoolrooms and playgrounds is interesting to the child. The presence of other individuals gives learning opportunities as well as chance for interchange of ideas. Materials which are available for manipulation encourage experiment, imagination, questions, and discussions among children and between children and adults.

Throughout the preschool laboratories materials have been chosen for their manipulative value, their adaptability for various uses, their suitability for the physical, intellectual, and social development of the children in the specific groups, their informational content, and their stimulating nature for

dramatic play.[1] It is not possible to describe certain materials as being "best" for children of a given age; rather, the aim in selection has been to furnish a background of materials for creating, developing, and expanding interests. Beyond this an attempt is made so to use the materials that the children are interested, occupied, and learning in a manner consistent with the objectives of preschool education.

Under the heading of general equipment come many of the materials customarily recommended for nursery-school use: blocks of all kinds, push-and-pull toys, manipulatory wooden toys, boxes of all sizes, mobile toys, transportation toys, outdoor equipment such as packing boxes, ladders, boards, steps, inclines, jungle gyms, and trapezes, doll furniture, constructive materials, and stationary equipment. Learning to manipulate this equipment offers intellectual development at the younger preschool ages, particularly. There is a sufficient supply so that all the children in a group can be occupied in activities which are of interest to them, and there is variety so that many different activities are suggested. In stimulating the children's activity, the teacher takes advantage of the effect of arrangement and rearrangement upon the use of materials. She places equipment where it will easily be seen, where there is ample space for effective use, and where worthwhile activities will be suggested. She may remove certain materials in order to further wider selection by the children. She may introduce new or different materials which show promise of appropriateness. Materials frequently need rearranging during the day. Such manipulation constitutes an effective means of controlling the activities of the children; it not only helps in encouraging more meaningful and progressive activity but may eliminate distracting influences.

In First Group, for two-year-olds, much of the stimulation of intellectual development comes through using materials belonging in this classification of general equipment and through talking about them. A smaller number of situations introduced from happenings or objects outside the preschool

[1] A complete list of the equipment in each building is included in the Appendix.

environment are utilized in this group than in any other. As a child progresses from this group to the next, and so on, to Junior Primary, this is decreasingly true. A large proportion of intellectual stimulation in the latter group comes through special activities describable under subsequent headings in this chapter. Between First Group and Junior Primary there are a gradually increasing number of situations classifiable as nature study, social study, or art activity and reflecting an attempt to introduce more into the environment than what has been described as general equipment. This does not mean that there is a proportional increase in equipment but that the use of equipment and to a certain extent its nature are intended to stimulate broader interests on the part of the growing child and to adjust to his developing mental ability.

First Group, Beverly, Age Three Years, Two Months; Tommy, Age Three Years

Beverly builds a round house with blocks and puts a small box down into it saying, "This is the bathtub." Tommy looks admiringly at the house and wants to get into it to take a bath. Miss Fales comments, "I don't think it would be a good idea for you to get in. If you try to get into the house, it will fall over. Why do you think it will fall over?" Tommy thinks for a moment and then answers, "It's too little."

"That's true," answers the teacher. "It is a little, tiny house—too little for you. You need a big house." Tommy stands doing nothing but looking disappointed. "Would you like to make a big house?" the teacher asks. Tommy nods in assent, but stands waiting. Miss Fales takes some of the longest blocks from the pile and says, "These are the biggest blocks we have. I think they will make a house big enough for you." Tommy helps to get some more long blocks from the pile, but then again stands back doing nothing. The teacher helps him to get started, and then he builds with enthusiasm. When his interest wanes, the teacher gives him more help and says, "I think it is big enough for you now."

"Now I want a bathtub," states Tommy.

"Look around and see if you can find anything which would make a good bathtub." Tommy looks around. He notices a box much like the one which Beverly has used for her bathtub, but larger. "Here's

one," he exclaims, and puts it into the house. The teacher helps him into the house so that it will not be knocked over. Tommy sits on the bathtub and pretends that he is taking a bath. He is much pleased.

* * *

Tommy is a child whose interests become easily discouraged if he meets difficulties. For this reason he often does not carry his activities through to the end. He has a tendency to leave problems rather than to solve them. For this reason the teacher gave him more help than she might have given to another child in the same situation. She tried, however, to show Tommy the problems and then to encourage him to solve them. When he became tired and could not do so, she helped him enough to carry his interest through. She might have simply told him, when the situation first arose, that he must not get into Beverly's house because he would knock it down. This would not indicate why he might knock it down. Even if she had simply told him that the house was too small and had carried the situation no farther, Tommy would have felt only disappointment that he could not carry out his wishes. He probably would not have thought of building a house, and even had he determined to do so, he would very likely have lost interest before it was completed. For this reason the teacher gave him some help, so that the time between his wish to get in the bathtub and his fulfilling this wish would not be so long that he would lose interest.

Tommy learned something of size of blocks in relation to what one wishes to do with them. He learned that it is satisfying to have an idea and to carry it through, and he learned to use his resourcefulness, by finding that even though he could not use Beverly's house he could find some other way in which his wishes might be carried through.

First Group

A monoplane passes overhead, rather low, and the children of First Group become much interested and excited. "See the airplane, see the airplane," several of them call. "It's a biplane, it's a biplane," calls Charles, who hears a good deal of discussion concerning air-

planes at home. The teacher asks, "What made you think it was a biplane, Charles?"

"Because it was," answered Charles.

"Do you know how we tell when it is a biplane? When it has two wings, we call it a biplane. That airplane had only one. I will get a book which shows different kinds of airplanes." The teacher goes into the school to get an airplane book and brings it into the yard. She sits down on the edge of the sandbox and several of the children gather around. Opening the book to the appropriate pictures, she says, "This airplane has two wings. What is it called?"

"A mail plane," volunteers Jack.

"It may be a mail plane. When an airplane has two wings it is called a biplane, and when it has one, it is a monoplane. What kind of an airplane did we see?" Several of the children answer correctly. The older children understand the distinction between biplanes and monoplanes. One of the children asks, "Were people on the airplane?"

"I think the plane we saw was a passenger plane," answers the teacher. "Probably there were some people on it. Perhaps it was carrying some letters too."

* * *

This experience taught the children the most apparent difference between monoplanes and biplanes. While looking at the airplane book the children saw other details which one cannot see when watching an airplane which is flying overhead. Perhaps some children understood that airplanes carry letters, but the real nature and significance of air transportation will not be grasped until the children are much older. This experience simply helped to give some underlying concepts and to increase interest.

Second Group

Eleanor stands two chairs on boards which she has laid in a row along the floor As she collects chairs from tables around the room, she remarks, "I have to get some more cars for my train." When one child objects as Eleanor takes his chair, Miss Oliver suggests, "Some of the children are using chairs at the tables but there are more in the dining room which you may use." Eleanor brings eight

chairs from the adjoining room and places them in a row on the boards. She turns to Miss Oliver, "I want someone to ride on my train." Miss Oliver answers, "Suppose you invite someone to take a trip." Some of the children refuse but Michael, George, Winifred, Billy, and Miss Oliver accept the invitation. Michael and Eleanor discuss who is to be engineer. "We need someone to drive the train," says Eleanor. Michael decides, "I'll be the engineer." Eleanor agrees, "All right." Michael climbs on the first chair, then gets off, announcing, "I'll have to get some gas." Miss Oliver states "Automobiles need gas but many trains use coal." Michael looks around for a substitute for coal and brings blocks which he dumps on a chair. He sits on the first chair and announces, "The train is going." Miss Oliver asks, "Where are we going?" "The train is going to Sioux City," answers Michael. Eleanor jumps off and asks Danny, Mary, and Helen to get on the train too. They refuse and Eleanor tries to push them toward the train. Miss Oliver tells Eleanor, "People go on trains when they want to go somewhere. Perhaps Danny, Mary, and Helen have other plans now and will come later."

The play shows signs of degenerating. Miss Oliver asks, "Who is going to take up the tickets?" Eleanor states, "I'm the conductor." Michael and Eleanor collect magazines and tear out scraps of paper which they hand to the children. Michael hands a picture of a baby to Mary, "You can have the baby ticket." Michael leaves and brings back his basket of clothes which he empties into a suitcase. "The engineer has to take his clothes." Other children get their baskets from the lockers. The children push and shove each other with their baskets as they climb back on the chairs. Miss Oliver explains, "On a train there is a baggage car for trunks, boxes, and suitcases which people can't carry with them." Eleanor sets her basket on a chair. "This is the baggage car." All the children pile their baskets on chairs.

Michael moves to the last chair. "This car is broken. I can't fix it." Miss Oliver says, "There are hooks and chains which fasten cars together. When cars have to be repaired they are uncoupled from the rest of the train." Michael removes the last chair in the line. As he pushes another one away he comments, "I'll have to unhitch this one, too. It's broken." The children lose interest and leave the train. Miss Oliver reminds them, "When passengers get off the train they take their suitcases with them."

Second Group

Miss Oliver is reading the story of *The Little Auto*. She reads, "Mr. Small is going for a drive. He steps on the starter. The engine begins to hum." Connie interrupts, "It wasn't an engine." "What makes you think it isn't an engine?" asks Miss Oliver. Connie says, "Well it couldn't be, you can't have an engine in an automobile." Miss Oliver realizes that Connie is confused by the word "engine." "There are several kinds of engines. One is the engine that pulls a train, another kind is under the hood of an automobile and makes the car go. Another name for it is 'motor.'"

The next day Miss Oliver reads the same story. When Connie comments again about the engine, Miss Oliver says, "I have some pictures of engines to show you, Connie Here is one of the engines which pulls the train. The train engine has to be large and powerful because it pulls so many cars—baggage, mail, passenger, or freight cars. This is a picture of an engine or motor of an automobile. It is small enough to fit under the hood of the automobile."

Second Group

The children notice Mrs. Walsh wearing a cellophane apron. "What's that?" inquires Teddy as he reaches out to touch it. Billy comes closer and rubs his hand up and down the apron. "It is nice and slick." Mrs. Walsh tells them, "This is my new apron. How do you like it?" Nancy comments, "It feels like paper," and Billy inquires, "Is it made of paper?" Miss Goodman remarks, "It is thin like paper," and George interrupts to ask, "Does it tear?" Miss Goodman answers, "I think it would tear if you stuck a pin through it." Billy wants to know, "Could you cut it?" "I think you could. If scissors are sharp enough they cut material. Mrs. Walsh's apron is thin; so scissors probably would cut through it." The children continue to touch it. Barbara notes, "It feels like silk." "Yes," adds Miss Goodman, "it is soft and it makes a rustling sound like silk. It also has a glossy finish. It looks shiny." Miss Goodman continues, "Why does Mrs. Walsh wear an apron?" Someone contributes, "To keep her dress clean." "Yes, and why do you wear aprons when you blow soap bubbles?" "Oh, to keep us dry," volunteers Barbara. "Yes, our aprons are made of oil-cloth and the water runs off. Mrs. Walsh's apron is waterproof, too, and it doesn't absorb water." Billy wants to know, "Will it burn?" Miss Goodman answers, "I

don't know, Billy, but if Mrs. Walsh should get too close to the stove it might burn." Miss Goodman puts her hand under the apron, "It is transparent; you can see through it." Billy thrusts his hand under a corner of the apron. "You can see Billy's hand. Do you notice his ring showing through?"

Third Group

Sam and Carl are attempting to load a small barrel of sand into a wagon but are unable to lift it. They ask the teacher to lift it for them. Instead, she asks them if they have ever seen freight cars or moving trucks being loaded, and asks how the men get into the truck the heavy things which they can't lift. Sam suggests, "We could use a derrick." Carl vetoes this suggestion with, "But we don't have a derrick and it is too hard to make one. I guess we can't put the barrel in the wagon." The teacher gives a hint as she says, "Perhaps you could think of a way to roll the barrel up into the wagon." "But," asks Sam, "how can we roll it up in the air?" The teacher instead of telling them directly, encourages the children to be resourceful and to use their ingenuity as she answers, "You can find a way if you stop to think what you need." After a moment, Carl suggests using a board and asks the teacher, "Is that the way?" "Try it and see whether it will work," she answers. So the children, without further suggestions from the teacher, try several boards until they have found one broad and long enough, and soon the barrel is in the wagon. The teacher has encouraged the children to solve problems by being resourceful instead of asking for help, and to find out the value of a method by trying it out instead of merely asking for advice.

Third Group

Harold has been making a toy wagon when he leaves his work to watch Earl, who is pounding nails into a piece of wood. Earl is much less experienced than Harold in his ability to handle tools and consequently is not yet ready for more advanced work. When Harold does not soon return to his wagon but begins to help Earl pound nails, the teacher steps into the situation, for she does not want Harold to be distracted from a worth-while activity in favor of one which, for him, offers no real challenge. (The social aspect of this situation is not needed by Earl.) To remind him of his wagon and to renew his interest, she says, "Your wagon isn't quite finished,

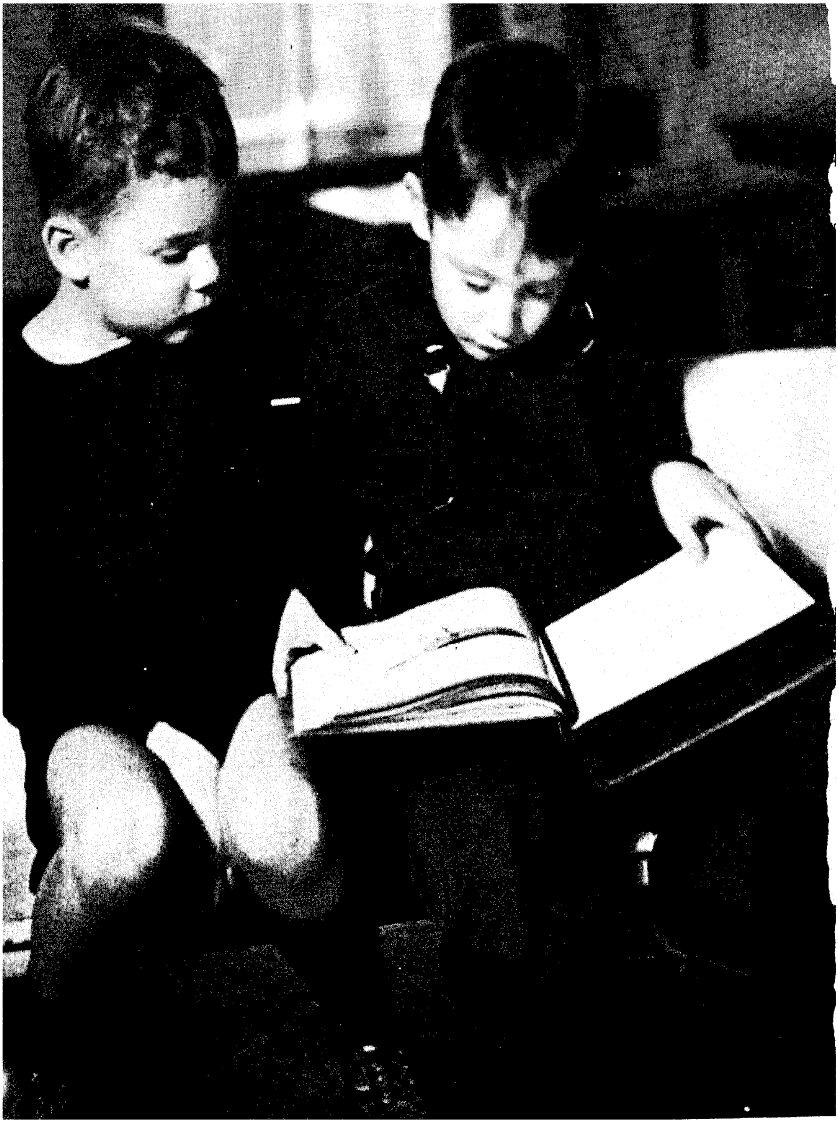
is it, Harold? If you have decided what color you want to paint it, I can start mixing the paint you will need while you finish putting on the wheels. I imagine the paint will be dry by tomorrow, then it will be ready to play with."

She does not merely remind the child that he is not through working on his wagon, for he may at the moment be finding that pounding nails is very enjoyable and may say he does not want to work on the wagon any more. Instead, she renews his interest by mentioning the paint, and by bringing indirectly to his attention how near he is to completing his purpose.

Third Group

The children are playing train. Harold is the conductor and is calling out, "Tickets, please; tickets, please." One of the "passengers" replies, "I don't have any tickets," and the conductor replies, "Well, can't you pretend that you have?" But Martha replies, "Let's ask Miss Dawe for some tickets." The teacher replies, "I haven't any real tickets. Why don't you make something that you can use for tickets?" Harold answers, "But how do you make tickets?" Here is an opportunity for the child to draw upon his experience and to use his ingenuity, so the teacher answers, "What are tickets made of, and what do they look like?" Harold and Martha think a moment and suddenly Martha says, "Paper," and immediately both children run to the supply shelves and are soon busily cutting bits of heavy paper. If the teacher had said, "Why don't you cut up some pieces of heavy paper; they would look like tickets," neither child would have had to remember what he knew about tickets, nor have had to be resourceful in thinking of a way to make them.

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V

Intellectual Development: Books and Pictures as Sources of Information[1]

Some books are written primarily to give information rather than to provide enjoyment from a literary experience. Others are not primarily so planned but may, if appropriately used, be a basis for giving information to children. The problem for the teacher in using books for this purpose is (1) one of clarifying her own ideas concerning methods of giving information and (2) one of maintaining standards for authenticity and appropriateness of information, which standards she may apply as well to literature, photographs, and line drawings as to any other experience.

The first step in using a book or a picture for the purpose of giving information is for the teacher herself to be accurately informed. She uses reference material so that she may be sure of the information and also that she may be aware of what she does not know. Her own source of information is a firsthand authority, the author of which has standing in his field; it is not a book in which material has been adapted or written for children, for in that case the chances are that the facts have been somewhat distorted. She attempts to know much more than she will use with the children, because a good background of knowledge aids her in making information both

[1] This discussion is primarily concerned with the use of books as means of obtaining information rather than as means of literary experience. The latter use is discussed in Chapter X

authentic and within the child's ability to understand; it also enables her to be better prepared for a wide variety of questions. She tries to gather as much information as possible through firsthand experience rather than through books only. The teacher feels that it is of great importance for her to be aware of what she does not know and to be frank to admit it. Such frankness is entirely possible even while attempting to give information to children; she can demonstrate her willingness and ability to remedy her ignorance and by various means keep the child's interest fresh until she secures the information.

The books or pictures are either incorporated in definite plans to provide subjects of interest or drawn from a general supply collected in readiness for opportunities arising through the children's interests or through happenings of the day. In using them, the teacher has already made sure both that the information they give is authentic and that the parts she uses are suited to the children's level of understanding. She does not confine herself to the book's order of presentation nor does she feel bound to use a book in its entirety. She lets the children's interest guide its use. She is sensitive in detecting and utilizing the children's directions of interest and tries to foster these by the facts she gives and by the form in which she presents them. She is cautious not to introduce too much new vocabulary at once and remembers that it is difficult to know immediately how much is being comprehended by the children; therefore she uses every indication by children's questions or comments to judge how much they are understanding. She does not flatly contradict a child's suggestion by stating the correctness of her information but tries to follow through his idea and hers until they meet. She does not forget that, in the light of the child's ideas or understanding, she may be wrong.

In selecting books and pictures as informational aids the teacher considers other standards in addition to the nature of the information in a book and the way this information is presented. Whether photographs are used alone or in books, they should be clear-cut and simple; the main purpose of the

picture is emphasized and much detail has been left out. For younger children, it is helpful to have only one picture on a page. Colors in these pictures should be authentic, and sizes of objects should be proportional; in this connection, the teacher frequently brings the children's attention to comparative size and color. The pictures are large enough to be clear. When they are used, they are placed where it is easy for the children to look at them. Certain precautions of a more negative nature are taken: a teacher is cautious in using story illustrations as sources of information; for instance, according to the manner in which some animal stories are illustrated, the figure is more of a caricature than a reproduction. It is quite possible to supplement a story with good pictures if the teacher wishes to use the book informationally. A teacher does not depend more than she has to on pictures; that is, she illustrates with the real object whenever possible.

In addition, if pictures or books are to be used in giving information, the teacher attempts to maintain a balance between experience, verbal explanations, and pictures. To depend on explanation without illustration or vice versa is not generally so effective in furthering interest as a combination of the two. A teacher uses books and pictures to supplement other informational activities: (1) in relation to some experience a child reports when he comes to school, (2) in regard to some subject which comes up for discussion either from a child or teacher, (3) as an introduction or part of a planned unit or subject of study, (4) before or after an excursion, (5) in relation to some constructive situation, (6) in dramatic activities, (7) as a chance introduction which is later utilized, (8) as a means of stimulating interest, (9) as an activity of the children in which they have free use of books and pictures; this stimulates questions and discussion between children and teacher.

From the fact that pictures are used in many different ways and under many circumstances, it is apparent that a large and varied supply of them is needed. Pictures of seasonal content are used at the appropriate time. Pictures related to current interests or occupations of the children are important

aids in furthering an activity. The teacher who is quick to notice pictures with possibilities collects from many sources a multitude of subjects and types. These are filed by subject according to a system which makes them accessible at a moment's notice and in such condition that they are kept flat and clean. Many of them are mounted.

VI

Intellectual Development: Nature Study

Every normal child is interested in his surroundings. The satisfaction which he derives from the world about him depends largely on the kind of adult sympathy and guidance he receives as his world expands. Intelligently guided, the young child has an opportunity to develop his natural interests and to live comfortably and happily in his environment, while the untutored or misguided child may develop unfortunate dislikes, unnecessary fears, or wrong attitudes. Many persons have developed uncomfortable reactions toward such experiences as thunder, lightning, creeping things, dogs or other animals, and the dark, because intelligent guidance was lacking at crucial points in their early childhood. Furthermore, many persons have grown to adulthood without the interest in their natural environment or the understanding of it which could have contributed to their enjoyment of life.

The field of nature offers an endless variety of objects, living things, and natural phenomena with which the child sooner or later must come in contact and about which he is naturally curious. He often asks questions about these and manipulates and experiments with everything within his reach. However, he cannot be left entirely to his own caprice in discovering facts and in exploring his world. He not only needs guidance, but he welcomes the information and timely suggestions offered to him by sympathetic adults.

Unfortunately no one knows what nature-study concepts are best taught at any age level. This need not, however, deter teachers from making conscientious beginnings in giving nature experiences. Children in any group differ in their needs, interests, likes, dislikes, and ability to understand. It is not possible or necessary for each child in the group to meet each experience with the same degree of interest or success. The following is an example of expanding interest because of the teacher's ability to respond to the child at the appropriate time:

Peter was almost five years old and extremely interested in rocks. He frequently came to school with a pocketful that he had collected. At first it was just fun for him to pick them up and carry them in his pocket. He did not share the experience with anyone. Then one day he showed them to his teacher, who was interested in them. She told Peter that she, too, liked to collect rocks. She asked, "Where do you find your rocks?" He told her and she suggested, "Are they all alike?" Together they examined them and Peter observed that some were smooth, others rough; some were flat and some thick. He observed differences in color and differences in weight. Other children were only casually interested in Peter's rocks, and after looking them over or asking a question or two they ran off to some other activity. From time to time, as Peter and his teacher studied rocks, Peter learned that some of the buildings in the neighborhood have limestone foundations. He learned that flint is very hard and that Indians used it to make arrowheads. He learned that in the hill beside the school building there is a very old coral reef. He was interested in the story the teacher told him about how the coral reef was made. Incidentally some of the other children were interested, too. Peter and some of the children hunted for pieces of coral that had been broken from the reef. With help from the teacher they learned to distinguish between the different kinds of corals. When Peter had exhausted his source of supply of rocks, the teacher hunted up pieces of marble, granite, and different kinds of ore. And so throughout the entire school year Peter and his teacher studied rocks, with the other children joining in as they wished to. Nor did Peter confine his nature experiences entirely to rocks, and the teacher found ample time to share many other nature experiences with the other children.

It should be added that Peter's enthusiasm for rocks spread into his home and both his parents became interested. They provided Peter with some shelves in the dining room where he could have a "museum." Peter, his parents, and his teacher often had to confer with each other over some rock or bit of information.

It is impossible to state what nature-study experiences are best at the nursery-school level, but it is expedient that the teacher know her own objectives. Too much cannot be left to chance teaching. Nature-study experiences should contribute to the child's development and are selected with the following objectives in mind:

1. To develop the child's awareness of his environment
2. To further and direct his interests in nature objects and phenomena and his enjoyment of them
3. To encourage an inquiring attitude and safe and constructive investigation
4. To encourage appropriate manipulation
5. To develop appropriate attitudes toward natural phenomena and nature objects
6. To eliminate unnecessary fears and dislikes and to avoid sentimentality and the acquiring of superstitious notions
7. To direct the child's interest so that he may discover facts for himself but to give him truthful, accurate information and correct nomenclature whenever possible
8. To develop and encourage constructive interests among individuals
9. To provide opportunities to develop vocabulary and language ability by having something interesting to talk about, both with each other and with the teacher
10. To provide opportunities for social development by having situations whereby the child learns to talk, to listen, and to share experiences

Teacher Guidance

Obtaining Information. That nature study has not received more attention in the program of guiding the young child may be because many teachers feel inadequate to the task on account of their own meager nature-study backgrounds.

However, before a teacher can successfully guide the child in his nature interests, she must herself be aware of, and interested in, all kinds of outdoor life and the phenomena about her.

The successful teacher has a scientific attitude toward natural phenomena. She has eliminated fatuous notions and unnecessary fears toward them. Often adults have acquired information about nature which is not wholly accurate; unfortunately they frequently relay this misinformation to children. Consequently it is necessary for a teacher to have as healthy an attitude and as clear and accurate an understanding of a topic as possible before attempting to guide the child.

A three-year-old child once asked his teacher, "Where does my food go?" And the unprepared teacher answered, "Down your mouth." Evidently not satisfied with the answer he received, the child repeated his question, and again the teacher gave the same reply. Without doubt, a three-year-old child cannot understand a lengthy discussion of the digestive process. But he probably could have understood a good deal about the processes of chewing, swallowing, and elimination. Such words as throat and stomach were within his understanding. He could appreciate the fact that he was growing and that his food helped him to grow and that the waste food that his body could not use was eliminated from his body. In this instance the teacher, not sure of her facts, felt inadequate in guiding this child's interest, and consequently his efforts to learn were thwarted. Had the teacher, at the moment, admitted her ignorance, she could have taken time to think the problem over. Later she could have given the child a satisfactory explanation, and thus encouraged his inquiring attitude and added to his knowledge.

Obviously it is impossible for any teacher to know all about everything in which a child may need guidance, especially in all the fields of nature study or science. Consequently the successful teacher will be willing to spend a great deal of time in study of the various fields of nature. Furthermore, she will continue her study all during her teaching life. Study need not be irksome. A great deal of information may be acquired by observing and enjoying nature. The conscientious teacher will find out "What is this?" "Of what use is it?" and "How does it work?"

Much of the difficulty in acquiring information lies in discovering where it may be found.[1] Teachers find it helpful to have in their own personal libraries such outstanding guide-books or manuals of information as they can use. Museums, zoos, and parks are accessible. Often there is an adult in the community who has developed a hobby in some field of nature and who is most willing to give freely of his time or information to an actually interested teacher.

The Choice of Teaching Situations. The teachers have found that they are more successful in guiding nature interests if they can meet the individual interests of the children and their parents. Furthermore, experience has taught that it is essential to know how to take care of nature material in school situations, for otherwise live objects are mistreated. A room temperature which is too hot or too cold, improper food, or lack of cleanliness cause illness, suffering, and usually death to live specimens brought to school. No animal life is kept in the schoolroom longer than it can be properly cared for. All such specimens, unless of a harmful, undesirable species, are returned to their natural environment. Harmful species are killed humanely.

Theoretically it is best to make use of teaching experiences as they naturally arise among the children. The successful teacher does this whenever possible. On the other hand, the nursery-school surroundings and equipment are, without supplement, necessarily far too meager to stimulate much interest in nature. Consequently the teachers provide the material themselves. They can do this in a natural and informal way. It has been found that once the children and their parents or other adults in the community learn that the teacher is interested in nature, they will bring many things to her and there will be no lack of materials.

Methods of Presentation

No one can prescribe any one method of teaching nature study to young children as being the best. In fact the teacher uses a

[1] A suggestive list of source material for nature study may be found in this book (p. 396*ff*).

variety of methods and adapts both herself and her method to the situation at hand. The teaching is as informal as possible and the material used is of immediate interest to the child. Especially with the youngest children the teaching is largely individual; occasionally one or two other children become interested, but the whole group is involved only seldom and never for more than a few minutes at a time. Beginning with the three-year-olds, the size of the interested groups increases until often at the four-year level and even more at the five-year level the whole group will be interested in a nature activity.

Especially at the younger ages it is advisable to give the child direct contact with nature objects whenever no harm will result to him or to the object. Often the most elementary identification is what the young child needs. The teacher says to him "butterfly," "ladybug," or "robin," when she sees him interested. Calling a child's attention to a bird at the feeding station or giving him some sunflower seed to put on the feeding station may sufficiently provide for his interest. Calling their attention to ice, ice melting, snow, wind, or warm sun may interest some of the youngest children. Digging the earth, raking, playing in the leaves, watering plants, and gathering leaves may also be suitable activities for them. The teacher, alert to the ability and understanding of the individuals in her group, can add to each child's experience at the appropriate time.

Often the same animals or the same activity can be used to good advantage at all preschool ages. As the children progress from group to group, their interest in the activity may increase, the activity may be increasingly shared with each other, they may ask more questions, and they may absorb more information. For example, individual two-year-olds may be interested only in handling white rats. Some of the children may be interested in their long tails or in some elementary facts about their physical make-up. More interest can be developed in the next older groups, where the children begin to share the activity with each other, where they talk to each other or the teacher or ask questions. These questions lead to

the acquisition of more knowledge, more interest, and longer contact. Consequently there is more opportunity for acquiring those attitudes and experiences which are the objectives of nature study. In the case of the three- and four-year-olds some child may bring his own pet rats to be kept at school for a time, or the group may go on an excursion to get a pair of rats from the laboratory which is providing them. Five-year-olds may make a suitable cage in which to house them temporarily. Committees of children can take turns in keeping the cages clean and in feeding the rats. The children can bring different kinds of foods from home to feed them. They will wait patiently for the baby rats to come and will be interested in watching the mother rat care for them and in watching them grow. These children, too, will want to know why the rats are in the laboratory. They can appreciate and understand the fact that the rats which are eating the right kinds of foods are growing into strong, healthy rats and those rats which are on poor diets are not growing properly.

The teaching of nature study is not a situation where the teacher tries to imbue the child with facts. Instead she makes use of any remarks, observations, or bit of information suggested by a child. Questions from individuals are encouraged, and as far as possible the information is gleaned from the children by giving a child who can answer another child's question the opportunity to do so. The teacher can direct observations and draw upon the children's experiences in such a way that they have an opportunity to discover facts for themselves. However, it is necessary for the teacher to answer many questions herself, and often she can give additional information which will be interesting or useful to the child.

Charles is three years old. One rainy day in early spring he found many big fat earthworms crawling over the sidewalk. Being interested, he picked up several and stuffed them into the pocket of his blouse. Later in the morning he remembered the worms. Calling to his teacher he said, "See what I got." The teacher helped him take out the sticky, slimy mass of nearly dead earthworms which she laid temporarily on a paper towel. While she helped Charles

clean up she explained to him that earthworms live in the ground, but when it rains very hard in the spring, the ground gets very wet and the earthworms crawl out of their tunnels. Once they get out they seldom find their way back but crawl around until a robin or some other animal eats them. She suggested that Charles take his earthworms out of doors and lay them on the grass. Other children became interested in Charles's experience, and so the teacher took the group out of doors where they looked for earthworms. She showed them the tracks left in the soft mud by the crawling worms. She showed them how she could tell where an earthworm had made a tunnel, from the castings it had left on top of the ground. They picked up some of the castings and found that they were made of mud, too. The teacher explained that the earthworm had eaten the dirt and that it had passed through the earthworm's body. When they picked up some of the castings they caught a glimpse of an earthworm as it pulled itself quickly back into the earth. Another day they watched a robin hop across the ground, stop, listen, peck at the ground, pull out an earthworm, and eat it. Later the teacher helped Charles and some other children put earthworms and loose garden soil in a large flower pot. They kept the earth cool and damp and later, as they were needed, the children dug out the earthworms to feed to their turtle.

The two-year-old children had had some white rabbits for several days. As a child held or patted a rabbit the teacher tried to enlarge his experience by conversation with him that was suitable to his experience and comprehension. To the child who had never seen a live rabbit she suggested the words "bunny" and "pretty white rabbit." She also suggested "soft white fur," "See the rabbit's long ears," "Rub the bunny's fur this way." She asked the children such questions as "Where is the bunny's nose?" and she showed them the rabbit's short tail. Some of the children fed lettuce and carrot tops to the rabbits. Not all the children were interested in watching them eat. They were, however, more interested in handling them. Since rabbits kick very hard and can scratch severely unless picked up carefully, the teacher discouraged the children from picking them up. Instead, she let one child at a time sit on the floor and hold the rabbit in his lap.

Some time after the children had had their experiences with the rabbits, the teacher brought some white rats into the same group.

None of the children had ever seen a white rat before. Although no child showed definite signs of fear, some of the children were more anxious than others to put their hands on the rats and pick them up. It was not long, however, before all the children were handling them quite freely. Of course the teacher was always on hand to make such timely suggestions as were needed.

When the rats were first brought into the group some of the children called them rabbits, and one or two children continued to do so. The teacher tried to explain some differences between the rats and rabbits to individual children by making such comments as: "See the rat's long tail." "See the rat's little round ears." "Don't you remember the rabbit had long ears?"

Suggested Nature Experiences

The following list of topics and activities is not intended to be exhaustive or to serve as a criterion for what is best to use in providing nature-study experiences. The items and activities listed are not all used in any one group within a given year. Rather the list is a compilation of what has been of use at various times. It is, therefore, only suggestive of possibilities for nature experiences. It does not seem justifiable at this time to give the details concerning how the topics have been or can be developed. Furthermore, the materials available vary considerably from time to time and are indigenous to this part of the country.[1]

Domestic Animals and Fowls

Some domestic animals and fowls may be kept at school for a limited time, some may be seen by the children on an excursion, and some, such as canaries, may be raised in the schoolroom.

[1] A study made at the Iowa Child Welfare Research Station concerns a program of nature study for a preschool group of three-year-old children. The study involves (1) description of a science program actually presented over a period of two years, (2) the evaluation of the material presented, in terms of the children's actual interest and learning, and (3) a classified bibliography for nature-study materials appropriate for use with children of this age.

Canary
Cat, kittens
Chicken, hen, rooster, chicks
Cow, calf
Dog, pups
Duck, ducklings
Goat, kid
Goose, gosling
Guinea pigs
Horse, colt
Mice (white and common)
Pigeons
Rabbits
Rats (white)
Sheep, lamb
Turkey

Wild Animals

It is not lawful or suitable to hold some wild animals captive, and procuring them for school is discouraged. Situations sometimes arise where injured animals or baby animals are found, and some of these may be cared for temporarily at the school.

Sometimes individuals have made pets of certain wild animals. These may be borrowed, but care is taken that the children are protected from injury.

Wild animals	*Lower animal forms*
Bat	Chameleon
Chipmunks	Clam
Fox (red)	Crayfish
Gopher	Earthworm
Mole	Frog
Muskrat	Goldfish
Opossum	Guppies and other tropical fish
Rabbit	Salamander (various kinds)
Raccoon	Snake (harmless)
Squirrel	Snail
Woodchuck	Spider
	Toad

Insects (in various stages of development, caterpillars, "worms," adult insects, cocoons, chrysalises, nymphs, nests, old skins, honeycomb, and so forth)

Ants
Bees (bumble and honey)
Beetles
Box-elder bugs
Butterflies
Crickets
Damsel flies and dragonflies
Flies
Grasshoppers
Katydids
Mosquitoes
Moths
Praying mantes
Walking sticks
Wasps
Water striders
Woolly-bear caterpillars
"Worms," inch, apple, nut

Flowers, Plants, Bulbs, and Seeds (which may be grown in the schoolroom or yard, or which are otherwise interesting to the children)

Cacti
Cattail
Coleus (foliage plants)
Corn
Crocus
Daffodil
Daisy
Dandelion
Easter lily
Ferns
Fungi
Geraniums
Goldenrod
Gourds
Hen and chickens (sempervivums)
Hyacinth

Jack-in-the-pulpit
Milkweed
Morning-glory
Narcissus (paper white)
Oats
Poinsettia
Potatoes (Irish and sweet)
Rubber plant
Sansevieria
Sunflower
Thistle
Tulips
Umbrella plant
Vegetables
Wheat

Trees (used either for elementary identification of the most common or for some interest in the part mentioned)

Catalpa (flowers and long seed pods)
Cottonwood (catkins and cotton)
Evergreens (needles, cones, Christmas tree)
Fruit trees (blossoms and fruits)
Kentucky coffee tree (seed pods)
Locust, honey (thorns and seed pods)
Maple (autumn coloring, leaves, and seeds)
Nut trees (nuts)
Oaks (autumn coloring, leaves, acorns)
Osage orange (fruit)
Pussy willow (catkins)
Sycamore (bark and seed balls)

Phenomena, Experiments, and Activities (which may be observed or used as topics of conversation or in which the children can take part)

Evidences of Seasonal Change

From autumn to winter:

Disappearance of certain birds
Leaves falling from trees, bare trees, winter buds on trees
Frost
Water freezing and melting
Snow, ice, sleet
Days growing shorter





Cold weather, need for different kinds of clothing
Fur on animals growing thick and heavy
Absence of insects
Hibernation of toads, frogs, snakes, and other animals
Icicles
Winter birds
Ground frozen
Ice on the river

From winter to spring:
Warm weather, less clothing, etc.
Wind: blows leaves, papers, dirt; blows clouds; makes air fresh, smells good, etc.; makes kites fly, etc.
Ground getting soft; frost coming out of ground
Clouds
Showers, thunder, lightning
Grass growing (getting green)
Plants coming up
Buds on trees coming out
Note the first insects, gnats, flies, bees, etc.; woolly-bear caterpillars crawling around
Dandelions
Earthworms on the sidewalk after a shower
Freshness and cleanness of the earth after a shower
Pussy willows (blossoms and pollen), leaves come later
Birds singing: note different calls of different birds; note different calls or songs that each bird has. Birds: cardinals, sparrow, pigeon, bluejay, robin
Rainbow
Croaking frogs
Sap running out of some near-by tree
Days growing longer
Dogs and other animals shedding fur
Ice breaking up on the river and going out

Additional Activities

Bringing in twigs of plum, lilac, and pussy willows and forcing them into leaf and bud
Soaking a few lima beans until the halves may be easily pulled apart to see the embryo and the surrounding food

Planting a few lima beans and from day to day pulling up one or two to watch what is happening

Growing a pot of beans away from the sunshine and at the same time growing a pot of beans in sunshine and observing the difference

Planting and growing potato cuttings in the same way as beans; observing the eye and the food for the plant; observing the sprouts on potatoes and how sprouts are white when grown in the dark and how long they get in their search for light

Watching for a bee or bumblebee collecting pollen from a dandelion. The teacher sometimes puts a bee covered with pollen in a small glass jar with a lid so the children may see it closely.

Locating last year's birds' nests in immediate neighborhood and finding out what kinds of nests they are

Making a wren house, putting it up, and watching for wrens

Collecting a few different types of nests such as the robin, the oriole, the catbird, the sparrow

Planting and growing narcissus bulbs

Preparing, planting, and caring for an outdoor garden

Caring for plants or window box in the schoolroom

Arranging and caring for cut flowers

Watching a butterfly come out of its chrysalis

Watching a moth come out of a cocoon

Watching cecropia moth caterpillars and silkworms spin cocoons

Observing the habits of ants both out of doors and indoors

Collecting grasshoppers, feeding them, watching them eat and lay eggs in the sand

Collecting grasshoppers and other large insects to feed a praying mantis

Balancing and caring for an aquarium

Siphoning refuse out of the aquarium and adding fresh water

Boiling water, watching steam rise and the water disappear from the pan

Freezing a canful of water and observing that ice needs more room than water

Watching ice change to water by applying heat
Popping corn and watching steam come out of the popper (Water in the kernel of corn changes to steam which needs more room and so bursts open the kernel)
Tying suet on a bush for the birds in winter
Building a feeding station for birds, keeping food on it, and watching the birds
Using a magnifying lens whenever feasible

A Museum Table or Shelf in the Four- and Five-year-old Groups (where children may put interesting things which they find or bring from home)

These specimens are changed from time to time. In addition to some of the specimens already mentioned, the following objects may be collected:

Birds' nests
Bones
Cicada skins
Coconut in the outside shell
Cotton
Feathers
Fungus growths
Nuts, acorns, and cones of various kinds
Porcupine quills
Rattles from rattlesnake
Rocks and ores of various kinds
Seeds and seed pods
Snake's skin
Specimens from the seaside including rocks, shells, seaweeds, corals, etc.
Trap-door spiders' nests
Wasps' nests, paper nests, and mud daubers' nests
Wood cut by beavers

Excursions

Many of the topics and activities already mentioned suggest excursion possibilities. In addition there may be trips to the zoo, the museums, and the woods.

Mechanical Devices, Watching Them Work, and Finding Out How They Work (these may be a part of the social-science activities and apply for the most part to the five-year-old group)

Electric clocks in the school
Electric fire alarm in the school
Electric gong in the school
Electric lights in the school
Engines
Flashlight
Levers
Magnet
Pulleys
Safe at the post office, which is burglarproofed with tear gas
Steam pipes and radiators in the school
Steam shovel
Thermometer
Weather vane

Equipment Suitable for Nature Study

This list of equipment is a compilation of what is available to all the groups. Although the complete list may not be found in any one group, the different items are available and may be borrowed and used as needed. It is also possible to borrow equipment from the elementary school, the high school, or other campus laboratories.

Animal cages, three sizes, with heavy, large mesh-wire sides, locks, and removable galvanized trays to provide for sanitation: one cage on casters, large enough to hold good-sized animals; one smaller cage, on casters; one cage small enough to be easily carried
Aquarium, rectangular, six- to eight-gallon capacity or larger
Aquarium, smaller than the above
Fish food
Fish net
"Fungus cure," potassium permanganate, mercurochrome (inaccessible to children)

Goldfish, tropical fish, oxygenating plants, snails, and other scavengers
Rubber tubing (about five feet), one-half inch in diameter
Salt
Tubs, small, galvanized

Battery jars
Bottles or jars with wide mouths, small enough for the children to hold
Chloroform
Fruit-jar lids or small pans
Insect cage, about eighteen inches square, wooden frame, screened sides, wooden lid with handle and lock
Magnifying lens, large round reading glass with handle, suitable for the children to hold
Mosquito netting
Mounting cases, small, medium, and large sizes

Bird-breeding cage, with necessary equipment
Bird seed for canaries
Canary cage
Food for wild birds: suet, sunflower seed, chick feed, etc.
Outdoor feeding station for winter birds
Wren's house

Bowls, flowerpots of various sizes, and saucers
Buckets
Garden space
Garden tools, hoes, rakes, spades, trowels
Plants, bulbs, seeds
Sand and pebbles
Soil, good garden soil
Window box with drain in bottom

Barometer
Thermometer, outside, with large letters and the mercury easy to see
Weather vane

Books with pictures or stories suitable for the children

Books for the teachers' reference

Pictures of animals, birds, insects, flowers, or other nature topics and activities. (These are collected by the teachers from newspapers, magazines, or elsewhere.)

Museum space, a shelf, table, or small cupboard within easy reach of the children, where nature-study specimens may be kept

Care of Specimens and Nature Activities

Insects

Insects are kept in aquariums, wide-mouthed glass jars, or large bottles for observation. Damp (not wet) earth is placed in the bottom of the jar. The top is covered with mosquito netting. Usually only one kind of insect is kept in a jar at a time. The insect is fed the kind of food it naturally eats.

In the case of caterpillars, the kind of food they eat may be determined by observing what plants they were found upon. Caterpillars that are crawling around and not feeding are very often ready to enter the pupal stage and do not need any more food. Some caterpillars dig into the earth to pupate. Some spin cocoons among leaves. Some crawl upon twigs and either spin a cocoon or fasten themselves onto a twig and form a chrysalis.

Some insects do not eat in the adult stage. This is especially true of many moths and butterflies. Some butterflies (especially the monarch) will sip a little sweetened water.

Mosquito wigglers may be kept in a glass jar of water covered with mosquito netting. A drop or two of kerosene dropped on the water will kill them.

Crickets kept in a jar in a quiet, fairly dark corner may sing. Males sing. They are fed lettuce, moist bread, and bone meal.

Earth containing ants and cocoons (sometimes mistaken for eggs) is put in a glass jar, the jar is filled about two-thirds full, and black cloth or paper is wrapped around the sides. The mouth of the jar is covered with thin cloth. The ants are fed sugar, bits of meal, and slices of raw apple or potato. (For

elaborate nests, see Lutz, *Field Book of Insects*, p. 416.)[1] The black paper or the cloth covering the mouth may be removed to watch the ants' activities.

Grasshoppers collected in the fall are kept in a small cage with about three inches of sand in the bottom. The females will deposit egg masses in the sand. They are fed lettuce, fresh tender grass, clover, etc. If the eggs are to be kept over the winter for hatching, they are kept moist, very cold, and frozen for a part of the time. Grass seed, oats, or wheat may be planted in flowerpots or boxes before the grasshoppers hatch. The young shoots make excellent food for the grasshoppers.

Cocoons may be brought indoors and in the spring the moths will come out. Cocoons to supplement the local supply may be purchased.

Insects may be killed by pouring a very little gasoline, chloroform, or benzine upon them.

The *Field Book of Insects* by Lutz gives details about collecting and mounting insects.

Animals

No one should attempt to keep fish without informing himself on the subject. A good reference book is Ida Mellens', *Fishes in the Home.*[2]

Bulletins published by the United States Department of Agriculture describe the raising of rabbits and guinea pigs.[3]

The care of canaries is considered in another bulletin.[4]

Bats may be successfully kept in the schoolroom if they are given the right kind of food. Any food given them must be chopped fine and fed from a shallow dish. They are fond of cottage cheese, sweet or sour milk, chopped honeybees, hard-boiled egg, unsalted raw beef, cooked vegetables, and yeast.

[1] Lutz, Frank E., *Field Book of Insects*, New York: Putnam, 1921. Pp. 562.

[2] Mellen, Ida M., *Fishes in the Home*, New York: Dodd, Mead, 1934. Pp. x, 178.

[3] Anonymous, Rabbit Raising, *U. S. Dept. Agriculture, Farmers' Bull*, 1920, No. 1090. Pp. 34.

Lantz, David E., Raising Guinea Pigs, *U. S. Dept. Agriculture, Farmers' Bull.*, 1915, No. 525. Pp. 13.

[4] Wetmore, Alexander, Canaries. Their Care and Management. *U. S. Dept. Agriculture, Farmers' Bull.*, 1923, No. 327 Pp. 21.

Land turtles, lizards, and snakes are kept in cages with wire-mesh sides. There is sand in the bottom of the cage and a shallow pan of water large enough to allow the animal to get into it.[1] The lizards are fed insects. Sticks and stones are provided for the snake to crawl over and to help to rub off its skin, providing it is ready to shed.

Toads are kept in an aquarium. Pebbles are placed in the bottom of the aquarium and covered with a layer of soft green moss, such as grows in damp places. Rocks, leaves, or wood are provided in such a way that the toad can hide himself. The moss is kept damp but not wet. Large black ants, small earthworms, and bits of raw liver make excellent food for toads. Toads must be kept out of the sunlight; the aquarium should be covered with a wire screen or mosquito netting.

Frogs are kept in an aquarium containing water and water plants. The aquarium is covered with a wire screen or mosquito netting. A stick or rock is provided so that the frog can spend part of its time out of the water. Sow or pill bugs and small insects which live in the water and in damp places are food for frogs.

Eggs of toads and frogs may be hatched in aquariums.[2]

Salamanders (mud puppies) are kept in an aquarium or container where shallow water can be provided and also stones and mud in which the "puppies" can bury themselves. They are fed small scraps of raw liver or beef, worms, and crickets.

The variety of animals that come into the possession of an interested person is too large to give the details for their care. A few suggestions follow:

1. The size of a cage should be adequate to give the animal plenty of space.

2. The cage needs to be kept scrupulously clean. Absorbent papers torn to bits, clean, dry sand, large packing chips, or very

[1] Comstock, Anna B., *Handbook of Nature-Study for Teachers and Parents Based on the Cornell Nature-Study Leaflets . . . 19th ed.*, Ithaca, N. Y., 1928. Pp. 942 (For food for turtles see p. 210)

[2] For complete details consult Comstock's *Handbook of Nature-Study*, p 185.

coarse sawdust may be used in the bottom of the cage. These should be changed often.

3. Wild animals should be kept out of doors, or provided with as much fresh air as possible. There should be shelter from rain, drafts, and extreme cold. Usually schoolrooms are uncomfortably warm for outdoor animals.

4. Plenty of fresh drinking water should be provided.

5. It is best to keep most animals in a building but a few days.

6. No attempt should be made to keep any animal unless adequate care can be given it.

A Vivarium or Terrarium

An aquarium, battery jar, or any container with glass sides is suitable for a terrarium. A layer of pebbles is put in the bottom and covered with good, black soil. Small woodsy plants, such as ferns, violets, polemonium, sedges, mosses, partridge berry, African violet, wintergreen, and grasses, may be planted artistically in the soil. Two or three small rocks and a piece of rotted wood may be added. It is watered as is a house plant (not wet). The terrarium is covered with glass and kept out of the direct sun. It will need no further care. One should not expect the terrarium to last more than a few months.

A few insects which do not eat the plants may be kept in the terrarium. Animals, too small to injure the plants, may also be kept. A tiny pan of water may be set in the terrarium to supply water for the animals.

VII

Intellectual Development
Social Studies

The term *social studies* is a general one used to designate or include those experiences which are utilized (whether they occur spontaneously or are planned in advance) to give the child an understanding of the society or social world in which he lives and to encourage him in acquiring knowledge concerning it. In this general field, most children have some interests even before they start to nursery school. If these can be utilized to advantage, they will expand and at the same time the child may develop desirable intellectual attitudes and habits. It is a fact that the child's immediate environment is of absorbing interest to him. From the teacher's standpoint, this immediate environment has the advantage of comparatively easy accessibility. There is much here that the child is ready to learn and capable of learning. In short, this general field is fruitful as a means of teaching habits and attitudes as well as intrinsic facts.

It may appear that in labeling the activities described below as "social studies," there is some presumption. Included may be anything from learning how to be a member of a group to observing the bottling of milk. It seems consistent, however, with the child's interests and his needs to think of this wide range of subjects in terms of and in relation to his own experience with them; they are the child's contacts with society and as such may be said to lay claim to the title of social studies.

Accurate information is not yet available as to what interests are the most vital or important at any age, so that it is more appropriate to describe general aims and illustrate these than to prescribe specific subjects. It is the school's aim to use the child's interest and his daily contacts as starting points and from these to utilize experiences to broaden his interests, increase his experience, stimulate his desire for knowledge, and guide his intellectual and social attitudes. In addition, it is a purpose of the program that the child may gradually acquire a feeling that he belongs to the community, that it serves him, and that, as a part of it, he has not only privileges but responsibilities. Such concepts as the last belong more to the upper preschool ages than to the lower, in which the process merely of becoming familiar with any common community enterprise or agent is the initial step. The preschool child is a member of a social group for part of the day. As such, he is acquiring social skills, habits, and attitudes and responding to social requirements. These are fundamental basic principles of community living. The aspects of the program which have to do with the child's experiences as a member of a group are discussed in the chapter on personal and social behavior. As for the child's other early contacts with community living, they vary from year to year with the interests of a particular group, with environmental opportunities, and with the abilities of individual children. It is feasible, however, to include several examples which illustrate how a teacher may develop such parts of a program in her specific situation and according to the maturity of the children.

Experiences of this kind are relatively infrequent in First Group, where the children are amply occupied in exploring the immediate surroundings, experimenting with materials, and learning the fundamentals of language and the first requisites of social adjustment. To a certain extent this is also true in Second Group. In Third Group, however, the children have a much wider range of contacts, more facility in language, independence and interest in working through projects on a group basis, and the interest and ability to carry through an

activity over a period of several days. Finally, in Junior Primary the child has some rudimentary landmarks concerning community living, can build upon these, and can carry through simultaneously a main project and its subsidiary ones on a fairly independent basis. It is possible so to interest the children of this age that many activities of the school can be related to one central interest and thus to enhance the possibilities of development through an interplay of interest and purpose.

First Group

A large coal truck backs into the yard next door to First Group and the children come running to the fence to watch it. The driver gets out of the truck and shovels coal into the basement window. Several of the children are satisfied simply to watch, but others talk about what they see and ask questions.

"It's a coal truck," shouts Jimmie. "See, here it comes."

"What is it doing?" asks George. "Is it coming here?"

"No," replies the teacher, "the truck is bringing coal for the people who live in that house."

"Now what is he doing?"

"He is shoveling coal into the window. The coal goes into the basement and the people can burn it in their furnace."

"We have a furnace," calls Sally. "We burn coal too."

"What happens when you burn coal in your furnace?" asks the teacher.

"It burns," volunteers Beverly.

"Yes, but why do you burn it?"

"It makes smoke," Tommy calls.

"Yes, and it makes your house get warm, doesn't it?" Several of the children call forth, "It makes the house get warm."

"Why did the man bring coal?" asks Tommy, who was showing more interest than anybody else.

"Perhaps the lady who lives in the house telephoned to him and asked him to bring it. The lady will buy the coal. She will send the man some money."

Tommy is interested in this explanation and probably understands it, as he plays at selling brooms and other objects, never forgetting to ask for the money. Most of the other children do not

hear the explanation but are interestedly watching the process of the coal being dumped. Then the truck drives away and the children call, "It's going, it's going."

* * *

For a number of the children the experience consisted mostly of seeing a truck backing into the yard and a man shoveling coal. They probably learned the name of coal, though some perhaps did not know what it was for. Some of the children made associations between this experience and their having coal and furnaces at home, and some learned or were reminded that coal burns in the furnaces and makes the houses warm.

First Group

The lawn next to First Group is being mowed. Three men are working, each one using a different kind of mower. There is a large mower with a motor, a smaller one with a motor, and an ordinary hand mower. The children hear the mowing and go to the fence to see what it is. They are told that the men are cutting the grass. Since the hedge is too high to see over, the children are taken to the other yard to get a better view.

Johnnie points to the largest lawn mower and asks, "Why does it make such a big noise?" Miss Fales answers, "It has a gasoline motor. That is what makes it go." Later when the hand mower passes, the teacher remarks, "That lawn mower does not have a motor. The man makes it go by pushing it. It is small so that it is not too heavy." Several children volunteer that they have lawn mowers at home. The children go to the part of the lawn which has already been cut and pick up handfuls of the cut grass. The teacher points out the part of the yard where the grass is still long and the part where it is now short.

Later the large mower is stopped and the children see the blades which cut the grass. "Why do they cut the grass?" asks Tommy.

"It looks nicer when it is kept short. We like the grass in the play yard to be kept short because then the dew dries more quickly. Then we don't have to wear rubbers such a long time."

The children go back to the school yard. Later some of them play lawn mower, using the brush broom to push around while they make a chugging noise.

Second Group

Karl arrives at school sobbing and holding tightly to his mother's hand. She explains that as he was crossing the street he slipped and fell and had been afraid a car would run over him. Miss Oliver helps him remove his wraps and, when he is somewhat calmer, suggests that they go look out of the front windows. She points to the two "stop" signs which are placed there every morning. "Those are signs which remind cars to stop. Each sign has printed on it the words 'School' and 'Stop.' When drivers see them they know that there is a school and that there will be children crossing the street." Miss Oliver and Karl watch for a car to drive past the school. "There is one now, Karl. He saw the sign and he is slowing his car. Now he is stopping before he passes our building. The driver is looking to see whether all the children are out of the street before he goes on. People who cross the street have to look to the right and to the left to be sure that it is safe and that there is no car coming. How could a driver let you know he is coming so you could get out of the way?" Karl thinks a minute before he answers, "He could toot his horn."

As other children enter the room, they come to the window to see what Karl and Miss Oliver are talking about. The teacher remarks, "There is a book called *Stop Look Listen.* I'll get it from the bookshelf." Since the reading material is beyond the level of a three-year-old, she does not read the words but comments instead about the pictures. "Here is a sign. What do you suppose it tells us to do?" Billy says, "That's a stop light." "Yes, it is. What does the red tell us to do?" The answer is, "That means stop." "Then what does green mean?" "Go." Reminded of the song about the traffic light, the teacher sings, "Green says Go, Red says Stop, watch the sign of the traffic cop." "Do we have any traffic lights in Iowa City?" Joan contributes, "This morning Daddy had to stop down town for the red light." "Here's a picture of Mary and John standing at the street corner waiting for the light to change from red to green. When it is green they can cross the street safely."

The next morning a trip is planned for four of the children. Before they start from preschool, the teacher together with the children discuss the safest way of crossing the streets. "What will we do when we come to a street corner?" "Look," says

Sarah. "When we reach the corner we will take hands so we can all cross together. We will look in each direction."

When they come to a street the teacher suggests that two children stay on each side of her. "Now is it safe? Do you see any cars coming?" When there are no cars in the immediate vicinity they cross the street. When they reach the traffic signal nearest the school, they stand on the corner and watch automobiles, trucks, bicycles, and the interurban obey the lights as they change.

Second Group

Many of the children are interested in foods and their preparation. When they go through the kitchen for some purpose, they frequently stop to ask Mrs. Walsh, the cook, what she is doing. Occasionally a child slips off to the kitchen to watch Mrs. Walsh. While playing they notice odors of food cooking and inquire what it is that they smell. To further this interest and stimulate questions and comments, Miss Oliver posts on the bulletin board some pictures. One picture shows the interior of a kitchen, another is a picture of a basket of vegetables, and a third is one of a garden. The children look at the pictures from time to time and some of them name the vegetables which they recognize, such as corn, tomatoes, celery, carrots, and onions.

Miss Oliver asks four children if they would like to go to the kitchen to visit Mrs. Walsh. The latter is preparing the orange juice when one group visits. The children pull out chairs on which to stand so that they will miss nothing that she is doing. She shows them how she turns on the sterilizer to rinse the dishes. Tommy remarks, "We don't wash our dishes that way at home." Peggy volunteers the information, "My mother uses a dish pan." After about ten minutes the children leave. Another group inquires where they have been and asks if they may visit the kitchen too. They notice the ice box as Mrs. Walsh puts the orange juice in it. "What's that?" inquires John. Barbara responds, "Don't you know that's an ice box?" Miss Oliver asks, "What do we keep in the ice box?" Barbara contributes, "Groceries" and Billy adds, "Oranges." "Yes, oranges are a part of the groceries which we buy from the store. How do we keep the ice box cold?" she asks. Billy says "Ice." Charles says, "Let me feel it." Each child rubs his hand on the ice. "We are letting hot air get into the ice box and the ice is melting.

What do you think we should do about it?" inquires Miss Oliver. Joan answers, "Close it."

When another group comes in Mrs. Walsh is preparing the vegetables. She tells them, "I am going to wash the celery now and cut it into small pieces." She has a pan of water and a brush ready. She remarks, "I'll have to use a brush to scrub the dirt off. I don't want to use the tops of the celery, so I'll cut them off." As she cuts off the leaves she pushes them aside. Miss Oliver inquires, "What do you think Mrs. Walsh will do with those tops if she doesn't use them." Donald answers, "Put them in the ice box." "No, she says she doesn't want them; so she will throw them away," states Miss Oliver. Donald comments, "She can put them in the garbage." "Yes, that is what she will do with them. The garbage man brings his wagon every afternoon to collect the garbage which Mrs. Walsh has thrown away. Do you know where the garbage can is?" The children look out of the window to see it. Harry picks up the brush and sticks it into the pan of water to wash a piece of celery. The other children clamor, "Let me have a turn. I want to do it, too." Miss Oliver asks, "Tomorrow would you like to clean some vegetables?" They cry, "Yes, yes."

The following day Miss Oliver has some vegetables in the kitchen for a small group of children to prepare. After tomato juice is served, Charles remembers the vegetables. "When can we clean the vegetables?" Miss Oliver reminds the rest of the group who watched Mrs. Walsh clean the celery that she has the vegetables. "Charles may get the bag that is in the pantry and Barbara may get the celery from the ice box." A few children join the group. As the vegetables are emptied on the table, two of the children ask, "What's that?" when a small sweet potato is held up, and the children are asked, "What is this?" Peggy replies, "A potato," and Joan remarks, "I think I can tell what kind it is. No, I can't tell. If it was peeled I could tell." Miss Oliver says, "Suppose we peel it to see what kind of potato it is." After the correct name is given, Miss Oliver comments, "Oh, this sweet potato is spoiled. It is soft in the center. Perhaps it was kept in too warm a room. We shall have to throw it in the garbage can." The children take turns touching the sweet potato and comparing the soft part and the hard section. When the celery is held up Barbara volunteers the information, "That's celery." "Yes," agrees Miss Oliver, "and when it is together like this it is called a stalk of celery." A turnip is





handed to Betty, who says, "That's a potato." "No," insists Barbara, "it isn't a potato but I don't know what it is." Another child comments, "They are dirty." Miss Oliver asks, "Why do you think they have dirt on them?" Donald answers, "They fell on the floor and got dirty." Billy says, "No, they were on the ground." "Where did we get our vegetables?" questions Miss Oliver. One child says, "From the ice box." "Yes, some of them were put in the ice box after they were brought to school, but where did they come from before that?" Joan contributes, "My mother buys vegetables at the store." "Yes," says Miss Oliver, "We buy our vegetables at the grocery store. Sometimes the truck stops at the back gate at preschool and the driver delivers vegetables to Mrs. Walsh. Do you remember that one morning a driver came with a box full of groceries and Charles ran to open the door to let him in because he said the box was too heavy for the driver?" Someone interrupts, "Like the box that Whiffy was in?" (referring to the story of Whiffy McMann).

Miss Oliver brings out a seed catalogue and holds it up for the children to see colored pictures of some of the vegetables. As the children name them, Barbara, who had been unable to identify the turnip earlier, points to the one on the table saying, "I know now, that's a turnip." Billy asks, "Can we open them?" Miss Oliver inquires, "What did Mrs. Walsh do before she cut up the celery yesterday?" Charles says, "She washed it. I'll get some water." He comes back with a small pan. Jane notes, "That pan is too little." Miss Oliver asks, "How can we wash them then?" Billy replies, "Let's wash them in the basin." Miss Oliver says, "Do you think Mrs. Walsh would have a larger pan?" Two children run to Mrs Walsh to ask for a pan. All the children ask for turns washing the carrots and potatoes. There is still some dirt on a rough section of the potato. "Do you think this one is clean?" questions Miss Oliver. "No," is the answer. "How did Mrs. Walsh clean her celery yesterday?" One child replies, "She threw away the tops." Another answers, "She used a brush." Barbara gets the brush. As Miss Oliver slices the carrots Jane comments, "I like them that way." Miss Oliver says, "They are good raw. When you chew them they go crunch, crunch." Charles wants to know, "Can we eat them now?" Another child inquires, "Can we take them home?" Miss Oliver says, "It is almost time to go home for lunch. Some of you didn't wash your hands and the pieces of carrots you are holding

in your hands are dirty. Perhaps you could take them home and wash them and have a slice for lunch." Billy states, "I don't like carrots not cooked." Miss Oliver says, "Maybe we could cook some tomorrow. Suppose we put the carrots and potatoes in water until tomorrow."

The next morning Miss Oliver asks Billy and a few others if they would still like to cook the carrots and potatoes. "What does Mrs. Walsh do about her hands before she handles the food?" After the children wash their hands they climb on stools and chairs around the table. Miss Oliver asks, "What shall I get to cook the vegetables in?" Peggy says, "Put them in a pan." "How many pans shall I need?" questions Miss Oliver. Barbara decides, "One for the carrots and one for the potatoes." The children have turns putting the vegetables in the pans. When the vegetables are done, the children are called and each child is given a turn using the potato masher to mash the potatoes and carrots.

When midmorning lunch is served, the vegetables are brought to the serving table. As the children bring up their empty glasses they notice the carrots and potatoes and ask if it is time now to eat some. With a few exceptions each child is eager to have a spoonful of each vegetable. Peggy comments, "I like those carrots." At lunch Billy is heard to ask at the table, "How do you cook rice?"

A General Description of Two Experiences in Third Group

Some of the children on their way to school remarked that men were digging a big ditch in the street. Some of them knew that the men were working on a new sewer. The teachers took the children in small groups down to see it. They watched the men shoveling and commented on the depth of the ditch. They learned that it had to be deep so that water in pipes would not freeze. They saw how the width of the ditch was measured and the course gauged by strings set to guide the men who were digging. They found out why the lamps were put up each night, that a red lantern and red flags were to protect people in cars and people on foot. They saw the size of the sewer pipes that were ready to go in.

The children were able to make more than one visit so that they saw the entire process, from cutting into the street to filling the ditch up again. Several of the children had no

clear idea of the purpose of the pipes; one child thought that when one flushed a toilet the refuse went into the water tank in back of the toilet. From these excursions they grasped the idea that men working for the city government were in charge, that it was the city's responsibility to take care of sewage disposal.

There was some discussion about what happened when things became caught in the pipes; several remembered the plumber's coming to fix the toilet when some child had thrown heavy paper into the toilet and when one of the washbasin drains had been clogged with sand. When the teacher reminded one child to brush some of the sand off her hands before she washed them, the child remarked, "I'd better get it off or it will get in the drain and stop up the sewer pipes." Several of the children had had pipes stopped up at home and knew how dirty and unpleasant it was. There was much dramatic play; many ditches were dug, boards erected to keep traffic away, make-believe lamps put up at the close of the day, and sticks laid as pipes.

This excursion was motivated by natural interest in experiences in the immediate environment. The children gained knowledge about how sewers are laid and what purpose they serve, and several desirable attitudes were encouraged, *e.g.*, the importance of health protection, safety precautions, and care in keeping drain pipes clear.

The children's attention was attracted one day by the sound of a steam shovel; in small groups they started out to investigate. They discovered that the alley in the next block was going to be paved and that the steam shovel was being used to dig up the alley, getting it ready for cement. The children were able to go each afternoon and follow the entire process—measuring and surveying the proper width, digging the road with the steam shovel, emptying the dirt into trucks which carried it away, shoveling out the dirt that the shovel left to make the edges even and the road level. They watched the preparation of the roadbed, and the mixing, pouring, leveling, and smoothing of the cement. The cement

mixer was a new and very large one which mixed and poured the cement, and the children could see how it was possible to control the amount poured and its direction. The teacher had pictures of cement mixers and steam shovels of various types and read many times from *Diggers and Builders* and *Steam Shovel for Me.* Thus the children heard an account of the process and could make actual observations; comparing similarities and differences they could see the speed gained by using the machines, and they saw, too, that some parts of the work had to be performed by hand, such as smoothing the edges of the road, smoothing the cement with long-handled swabs, and laying down wet covers to keep the cement from drying too quickly. At the same time one of the children told how a new driveway was being made at her house, but that a small portable cement mixer was used. This was loaded into a truck. Their driveway was smaller and hence most of the work was done without elaborate machinery.

The children made many roads in the dirt plot and mixed much imaginary cement. Margaret's father said that the preschool children could have some leftover cement powder. A few of the children went with the teacher to find out how to mix the cement and how much sand and water to use and were greatly amused when the man told them to mix it until it looked and felt like oatmeal. Each child mixed some cement by himself and put it in a mold of his own choosing. Some of them wanted to try various amounts of sand and water, and some learned, to their dismay, that it is wiser to follow the directions of an experienced person.

Social Science in Junior Primary

In the five-year-old group a variety of social-science activities occupy the children for varying periods of time. More or less incidental and unplanned, they are introduced by the children themselves, sometimes through their dramatic play, sometimes when a child brings something to show the other children. A child may have visited a farm or a place where construction work is going on and wishes to tell the others

about his experiences. Often the social-science readers and books to which the children have access stimulate interest. The amount of time spent on these more or less incidentally introduced subjects depends largely on the interest of the group. However, since some of them are studied more intensively in other grades in the elementary school, these are not taken up in much detail in Junior Primary. For example the first grade studies farm life and the second grade Indian life.

In addition to the social-science interests which come up thus casually, the five-year-olds participate in four definite and carefully planned social units necessary to community living: the home, the store, communication through the post office, and transportation by train. In order to adapt these units to these children, they have been organized into the following:

The Playhouse
The Play Store
The Post Office
Train Study

The post-office unit is here included in some detail to illustrate how a social-science unit for the five-year-old group is planned, organized, and developed.

THE POST OFFICE[1]

Somewhat detailed outlines of some aspects of the post-office unit are included as being generally descriptive. The various subheadings indicate the background of the teacher's thought and are of help to her in guiding the children's discussions and activities. The aim is to draw as much material as possible from the children's experience and thought. The materials, activities, and subjects for consideration vary each year in nature, extent, and emphasis depending on each group. Topics and facts found to interest children and to be productive of worth-while activities have been chosen.

[1] This unit has been worked out by Bernice Stormes in connection with the curriculum of the University elementary school

PURPOSES OF THE UNIT

A. To give the child some understanding of how people communicate with each other by mail

1. We can write letters to our relatives and friends to tell them what we want to.
2. Our friends and relatives can write to us.
3. Sometimes we get letters from people we would not hear from otherwise.
4. It is cheaper to write letters than it is to communicate by long-distance telephone or telegraph, so that writing is the commonest way to communicate.
5. We can order by mail many things that we want to buy in other towns.
6. People who have things to sell can send us advertising matter to tell us about them.
7. Newspapers, magazines, bulletins, and pamphlets that tell us many things can be sent through the mail.
8. We can communicate with people in other countries.
9. We can send through the mail many things besides letters to people and other people can send things to us.
10. Knowing how to read and write is a great help in being able to communicate with people.

B. To give the child some understanding of how mail travels

1. Most letters are carried from one place to another by mail trains or cars.
2. Some letters are carried by airplanes.
3. Letters are carried across the seas on boats.
4. Air mail travels faster than other mail.

C. To give the child some understanding of how mail is delivered.

1. Mail is taken to and from trains and airplanes by mail trucks.
2. A postman delivers mail.
3. Postmen in town walk from house to house to deliver mail.
4. Rural mail carriers deliver mail by auto.
5. Mail is delivered in all kinds of weather.
6. It is very difficult to deliver mail to some places.
7. In some other countries mail is delivered in a different manner.
8. A special postman who rides a motorcycle or drives a car delivers special-delivery mail.

9. A parcel-post man delivers parcel-post packages in a truck
10. Some people have their mail put in a private mailbox in the post office, where they can go and get it.
11. Some people who are stopping in a town for a short time, and who have no regular address in that town, have their mail sent to General Delivery at the post office. These people have to go to the General Delivery window and ask the mail clerk for their mail.
12. Mail is not delivered on Sundays and holidays.
13. The postman wears a uniform and carries a leather mailbag
14. The postman cannot carry all the mail he has to deliver at one time, and the extra mail is left in storage boxes, where he can pick it up.

D. To help the child understand that people have certain responsibilities toward having their mail delivered safely

1. They should address the envelope plainly so that postal clerks and postmen can read it easily.
2. The mail should be addressed with the name of the person to whom it is being sent, the name of the street on which he lives, his house number, and the name of the town and state in which he lives.
3. The person who sends the mail should put on it his return address; that is, his own name, street, and house number; and the town and state in which he lives.
4. The return address should be put in the upper left-hand corner, where it can be read easily.
5. The stamp or stamps should be put in the upper right-hand corner of the envelope.
6. Envelopes carrying letters should be sealed.
7. Packages should be wrapped in firm paper and tied securely so that they will not be torn open easily.
8. Things which are easily broken should be packed so they will not break.
9. Packages should be marked "Fragile" if they contain things that will break.
10. Packages containing food or other things that spoil should be marked "Perishable."
11. Letters or writing should not be sent in packages.
12. Money should not be sent in letters or packages.
13. Packages should be mailed early at Christmas time.

14. Valuable letters should be registered.
15. Valuable packages should be insured.
16. It is safer to send a money order instead of money.
17. Special-delivery mail is delivered more quickly than regular mail.
18. Air mail goes faster than regular mail or special delivery.
19. The fastest way to send mail is by air-mail special delivery.
20. People can drop their letters in a corner mailbox, a substation mailbox, or in the post office.

E. To help the child understand and appreciate the services of the different postal workers in taking care of all the mail that comes into the post office

1. It takes many people to take care of the mail in a post office in a city.
2. Each worker has his regular job to do.

The Postmen

1. Postmen deliver mail regularly on regular routes.
2. Postmen often collect mail on their routes.
3. Some postmen collect the mail at regular hours from corner mailboxes and substations.
4. Each postman takes the mail out of his stall and sorts it so that he can deliver it.
5. A special postman delivers parcel post.
6. Each postman puts the right mail into pigeonholes with addresses on them.
7. He ties the mail in each pigeonhole into a bundle with a strap around it.
8. He fills his delivery bag with the bundles of mail he is going to deliver first.
9. A mail-truck driver takes the extra bundles to a storage box, where the postman can get them on his route.

Postal Clerks

1. Some postal clerks sort the mail and face the letters so they can be put through the canceling machine.
2. A postal clerk operates the canceling machine.
3. A postal clerk has to cancel by hand the stamps on letters that are too heavy to go through the canceling machine or those put on incorrectly.

4. Postal clerks sort the mail to find out where it goes and put it in the right mail sacks to send it out on the right trains or airplanes.
5. Some postal clerks try to find the right address to put on mail that is not addressed right, and the larger the city the more difficult it is to find people.
6. Postal clerks load the sacks of mail onto push trucks and wheel it to the loading platform, where it is put into mail trucks.
7. Some postal clerks sort the mail that comes from the train or airplanes and put it in the right stalls for the postmen who will deliver it.
8. A postal clerk sells stamps of different denominations, stamped envelopes, and post cards.
9. A postal clerk weighs parcel-post packages and tells the customers how much to pay.
10. This clerk puts stamps on the packages.
11. He writes "Fragile," "Perishable," or "Insured" on the packages.
12. He writes a receipt for an insured package and gives it to the customer.
13. A postal clerk looks for general-delivery mail and gives it to the people as they ask for it.
14. Postal clerks at the windows answer people's questions.
15. Postal clerks sort the mail and put it in the right private mailboxes in the post office.
16. Postal clerks sort out the mail to be delivered by rural carriers.
17. A postal clerk sorts out special-delivery mail.
18. A postal clerk registers mail.
19. A postal clerk writes money orders.
20. A postal clerk takes care of postal savings that people deposit at the post office.

Rural Mail Carriers

1. Rural mail carriers sort mail they have to deliver.
2. Rural carriers deliver mail by auto and leave it in mailboxes beside the road.
3. Sometimes they buy stamps for their patrons.

4. Sometimes rural carriers scatter grain, that people give them, along the road in winter to feed the birds.

U. S. Mail-truck Drivers

1. Truck drivers load and unload mail at the post office, the trains, and the airplanes.
2. Truck drivers drive the U. S. mail trucks.
3. A parcel-post truck driver delivers parcel-post packages.
4. Some truck drivers collect mail from the substations.

Postmaster

1. A postmaster is in charge of everything and everybody at the post office.
2. The postmaster and postal clerks help straighten out difficulties people get into because of their mail.
3. There is a postmaster-general (Mr.) who lives in Washington, D. C., who is in charge of all the United States mail business.

Inspectors

Sometimes postal inspectors visit the post office to see if everything is right and to see if everybody does his work right.

F. To acquaint the child with the post office

1. It is a government building and always has a flag above it.
2. It is a public building which everybody has a right to use.
3. There are signs to tell people what it is and where to go to take care of their business.

U. S. Post Office
Letters
Air Mail
Stamps
General Delivery
Parcel Post
Registered Mail
Money Orders
Postal Savings
Postmaster
No Admittance

4. The post-office windows are open for business on certain days at certain hours.
5. There is a fireproof and burglarproof safe in which to keep money, stamps, and other valuable papers.
6. There are places where inspectors can watch the clerks work without being seen.
7. There are counters with pens and ink where people can write.
8. There are wastebaskets where people can put waste paper.
9. There are guns which the postal clerks could use in case of a robbery.
10. There is a radio.
11. There are sorting tables.
12. There are stalls and pigeonholes in which to put mail.
13. There are loading baskets and trucks in which to carry mail.
14. There are iron frames from which the mail sacks hang.
15. There is a canceling machine.

G. To utilize purposefully the child's desire for dramatic play

H. To provide opportunities for group discussions and to take care of individual children's interests in stamps and mail

I. To provide for new experiences and to help increase the child's vocabulary

J. To provide opportunities for real situations in connection with the post office
1. The writing of a group letter
2. Each child mails a letter
3. Actually following a letter mailed by the group through all its handling at the post office

K. To provide opportunities to develop reading readiness
1. Signs
2. Recognizing different denominations of stamps and different kinds of mail
3. To have some practice in letter writing
4. For each child to learn his own address

L. To give the child the understanding that each person's mail is his own private business
1. No one should open another person's mail unless the person is willing that he should.
2. No one should read another person's mail unless the person is willing that he should.

3. Anyone who finds another person's mail should deliver it to that person, to a postman, or to a clerk at the post office.

SUGGESTIONS FOR WORKING OUT THE UNIT

Since a study of the post office presents so many real beginning-reading situations, it has been found preferable to postpone the more intensive part of the study until the latter part of the year. This is especially true in regard to collecting stamps and other materials for the children's booklets.

Probably few units of study carried on at the five-year-old level offer better opportunities to provide for individual interests and abilities, and it is the interests of the individuals that guide the teacher in developing this unit. The more capable and mature children can accomplish considerably more than the less mature. For example, although most of the children develop an interest in stamps and post-office material and in collecting both, some children may collect enough for only three or four pages while a few may collect material for thirty or forty pages. The teacher's part in the study is, of course, to stimulate each child to his full capacity and help him to accomplish as much as is appropriate in light of his needs.

BUILDING A PLAY POST OFFICE

Whether or not a play post office is built depends largely upon the group. Usually, the playhouse, another activity, is built by the time the post office unit is studied. Consequently after the study of the post office is introduced, the children begin to dramatize the activities of the postman and deliver mail to their playhouse. After the children actually visit the real post office, if not before, then they try to build some sort of play post office.

If a play store and a playhouse are already under way, the idea of community life can be further developed through the building of the play post office. The children as a group plan how the play post office is to be built. They choose committees to take care of the different jobs. Usually the play post office is built of the building blocks which are a part of the room play equipment. However, these are sometimes already in use, and then a structure of orange crates in one corner of the room constitutes the post office.

Some of the furnishings suggested and built by the children are pigeonholes, a counter, stamp and money drawers, a parcel-post

window, slots for letters and air mail, and a truck to carry mail. Sometimes the children have tried to make a canceling machine, but so far have not made anything that has been actually operable and have consequently resorted to hand stamping.

OPERATING A PLAY POST OFFICE

The children bring from home used envelopes, post cards, and advertising matter to use for their mail. They also bring used parcel-post packages. Occasionally the teacher gives them a few inexpensive unused envelopes to use. Sometimes the supply of stamps kept in the play post office is taken from the surplus of used stamps brought by the children or given to them by the postal clerks at the real post office. Care is taken to emphasize the fact that used stamps can be used only for play and are never used on real mail.

A stamping pad and two or three hand stamps are also a part of the furnishings. However, an attitude is built up with the children that the stamps must be used only on their play mail. Scales for weighing "parcel post" are also given to the children for the play post office.

At different times real stamps have been kept in the play post office and sold by the children to any adults in the school or to other children who wanted to buy them. When this activity is carried out the children first obtain permission from the postmaster to sell stamps. They call their post office a substation. The teacher and the children decide what stamps they will sell and how many they will buy. Only a small supply is kept on hand, for example:

10 one-cent stamps
10 two-cent stamps
10 three-cent stamps
10 air-mail stamps
10 special-delivery stamps

When one denomination is sold out, more can be bought. Sometimes the children have dictated a paragraph which tells what stamps they sell and what hours the stamp window is to be open. This paragraph is printed by the teacher and duplicated so that a committee can take a copy to each of the rooms in the school to be posted on the bulletin boards.

Taking care of the money presents an administrative difficulty. In this school, one child usually takes the stamp drawer and money

drawer to the office every night and asks the secretary to put them in the safe. Although no money or stamps have ever been taken, such a thing might easily present difficulties. Then, too, five-year-old children are too young to be depended upon to make change without supervision.

Actual Problems Faced in Building the Play Post Office

1. What fixtures do we need?
2. How can we make slots where we can mail letters and air mail?
3. How can we make a parcel-post window?
4. What signs do we need?
5. What can we use for stamps and mail?
6. What can we use for money?
7. How can we make pigeonholes?
8. How shall we manage to give everybody a fair chance to work and play?
9. What rules do we need for play in the post office?

Actual Problems Faced in Selling Stamps

1. Do we have the right to sell stamps?
2. How can we let people know we are going to sell stamps?
3. What denominations shall we sell?
4. How much can we charge?
5. Who shall sell them?
6. Where can we get the money to buy stamps?
7. How can we take care of the stamps and money so they will not be lost?

Writing and Sending Letters

It is important that the study be made as real as possible, and the actual writing of real letters to real people aids greatly toward this end. Although many and varied opportunities may be provided for the writing of letters, there is one which has proved especially real and stimulating, since it provides an opportunity for each child to send a letter and to receive a reply. The children have been asked if they would like to send a letter to their grandparents, to a friend, or to some other relative in order to tell them about the school. Each child brought an envelope on which was written the name and address of the person to whom he was going to send his letter. They

were also asked to bring a three-cent stamp, not pasted onto the envelope. As a group, the children dictated the letter to the teacher. The heading and ending were discussed, and, since there is a regular form used by all the children in the elementary school, this form was used on this letter. The copy of the letter was taken to the office and mimeographed copies made, one for each child. Those children who could, printed their own names in signing the letters; the teacher printed for the children who could not. Each child folded his letter correctly, put it in his envelope, sealed it, and put the stamp in the right place.

Each child in this group is expected to learn his own name and address. The teacher asked each child to tell her his name and address and when he did so she wrote it on the upper left-hand corner of his envelope and explained to him, if he did not already know it, that this was his return address. The whole group of children were then taken to the post office to mail their letters. Usually some of the children have mailed their letters in the corner mailbox which they pass on the way to the post office. Obviously, this activity was not accomplished in one day, but occupied several periods over several days.

In due time most of the children receive replies to their letters. Some children ask to have these read, others do not, and some children never bring theirs to school. The teacher respects each child's wish in regard to this. Many of the children paste their letters in their booklets.

Actual Problems Faced by the Group in Writing a Letter

1. How shall we begin our letter?
2. What shall we put in our letter?
3. How shall we end our letter?
4. How is a letter folded?
5. What kind of stamp shall we use and where shall we put it?
6. How shall we address our letter?
7. What is our return address?
8. Where shall we mail our letter?

Visiting the Post Office

Probably it is more satisfactory to make two excursions to the post office. During the first excursion the children may only mail their letters and observe a few of the activities carried on there.

After one or two of the best books about the post office have been read to them and they have collected some mailing matter and discussed many problems, the children are better able on a second trip to ask questions and understand what goes on at the post office.

The teacher always makes arrangements with the postmaster or his assistant before taking the children to the post office to see what goes on in the workroom. The children visit the post office to observe:

The post-office building
How to mail letters
How to mail a package
The stamp and general-delivery window
Private mailboxes
What happens to letters after they are dropped into the mailing slot
The canceling machine
The mail sacks
How the mail is sorted
The postal clerks and postmen at work
How mail is loaded into the trucks
Signs that are used around the post office
Anything of interest that happens to be going on at the time they are there

Collecting Post-office Materials

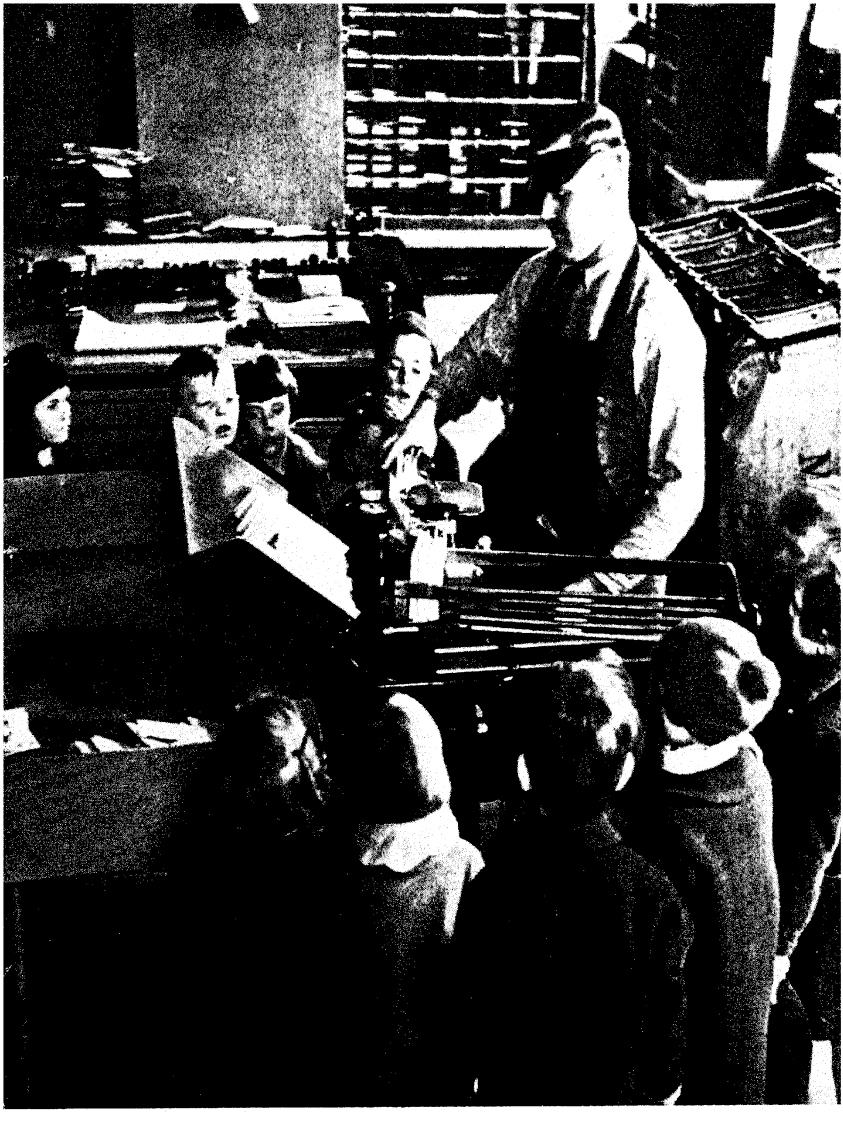
Although a booklet containing canceled stamps and other mailing matter may be made by each child, the nature of the material included depends upon the child. The teacher encourages each child to make use of what material he is able to find at home, and often she is able to give him additional material. Some children are able to collect material for only a few pages, while others have many more.

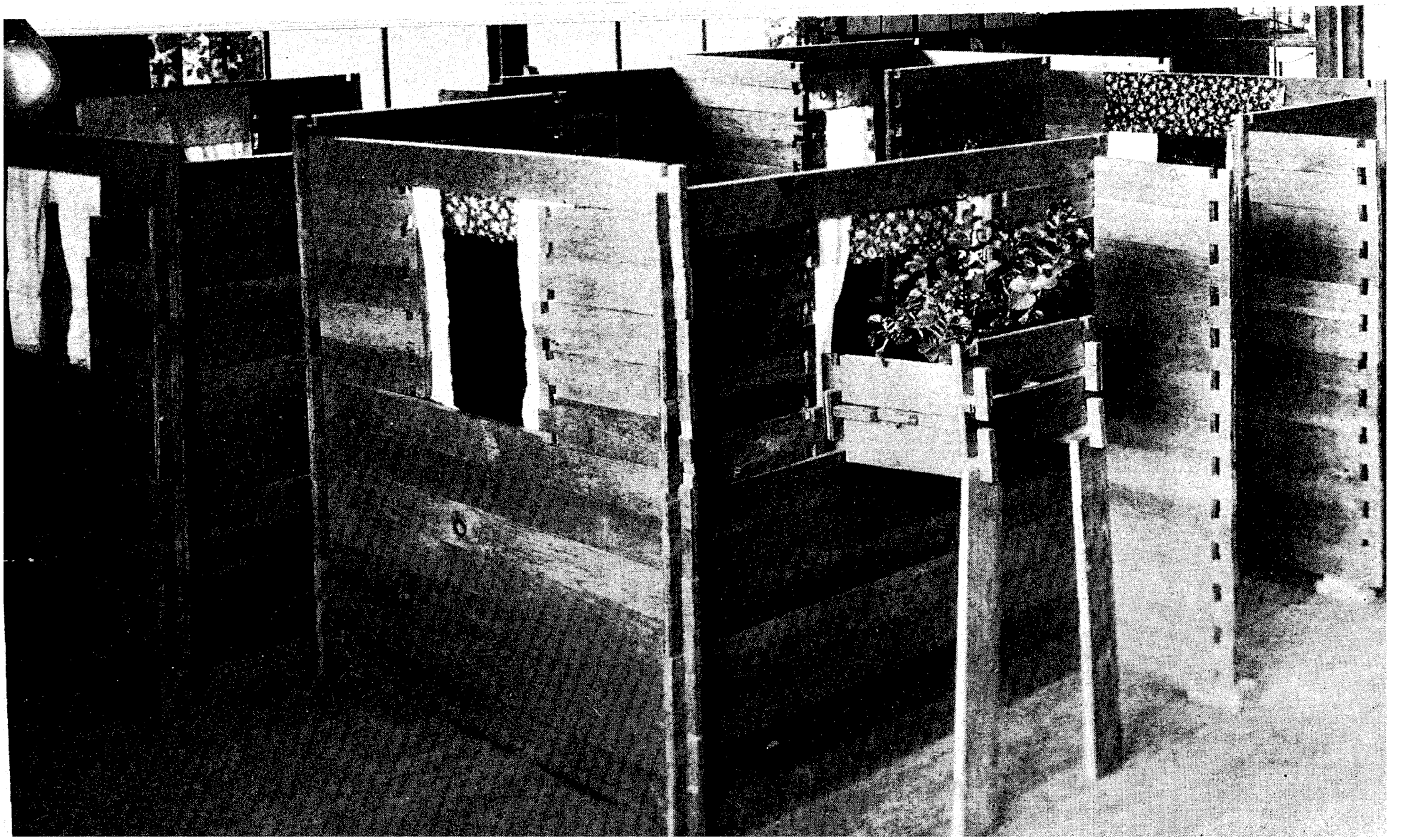
It is sometimes necessary for the teacher to help the children sort their materials and put them on the right pages, but they are encouraged to work independently so far as is possible.

Often children bring duplicate materials which they share with other children.

Any printing done in the booklets is done by the teacher.

It has proved very satisfactory to have each child keep all the pages for his booklet and stamp materials on his own cupboard





shelf, in a large Manila envelope, on which is his name. Small jars of paste, toothpicks, and extra pages are kept where the children have access to them. The pages are about nine inches by twelve inches and are cut from a bolt of wrapping paper.

For the most part the teacher works individually with each child on his stamp book, during the periods when the children are free to choose their activities. Each child brings his material when he can find something suitable, and it is not often that the whole group has work to do at the same time.

Occasionally the parents of certain children become interested in collecting stamps, and these children bring far more material than can be taken care of at school. In such cases the child is given extra pages to take home to fill. This is especially true when parents provide the child with many foreign stamps. The materials most frequently used in the booklets are:

A page showing the different denominations of United States stamps
A page of special issues or new issues
Special-delivery stamp
Air-mail stamp
Air-mail special-delivery stamp
An envelope addressed correctly
A letter or other mail that a child has received
A page of postage-due stamps
A government post card and a picture post card
A money-order blank and a money-order receipt
A wrapper or part of a wrapper from a parcel-post package showing stamps, address, return address or other data on it
An order to change one's address
A page of foreign stamps

The following are suggested approaches to the unit:

1. For several years the children in Junior Primary have studied a unit on the post office. Consequently a regular visit to the post office and the collection of stamps and other mail materials have almost become a tradition, so that these are some of the things the children expect to do when they come to Junior Primary. A question which the children ask very early in the year is, "When are we going to begin our stamp books?"

2. The postman delivers mail regularly to the University elementary school. This fact may be used to stimulate interest in the post office.

3. Occasions arise which offer an excellent opportunity to write a real letter. Some child may be ill or move away, and a group letter may be written to him. The group may write to some company asking for information, a catalogue, or pictures which are distributed free of charge. Perhaps someone has sent the group something of interest, and the group will write a letter thanking him for the gift. The children may want to take an excursion to some place of interest and they can dictate a letter asking permission to visit.

4. Occasionally some child has already started a collection of stamps at home and brings it to school to show to the other children.

5. Sometimes an adult interested in the group writes a letter to the children.

SOURCES OF INFORMATION

1. Much of the information is obtained by actually observing the different activities of the postal clerks.

2. Some information is obtained from actual pieces of mail.

3. Some information is obtained from pictures.

4. The teacher supplies some information.

5. Information may be obtained from the post office.

6. The following reference material may be used.

The Post Office, by Katherine L. Julian, *The Instructor*, 1937, 46 (February), pp. 50-57.

New Stories (Community Life), a second reader, by Marjorie Hardy, Chicago: Wheeler Publishing Co., 1926. Pp. 220.

The Postman, by Charlotte Kuh, Happy Hour Books, New York: Macmillan, 1929. Pp. 24.

Good Companions Series, Book 1. *Helpers*, by Rose Lees Hardy and Geneva Johnston Hecox, Chicago: Newson & Co., 1931. Pp. 32.

The Post Office, by Wilhelmina Slootmacher, Unit Study Books, No. 207, Columbus, Ohio: American Education Press, 1934.

Owney, the Postal Dog, by Avah W. Hughes, Picture Script Series, New York: Edward Stern & Co., 1935.

Special bulletins, pictures, and other materials obtainable from the U. S. Post Office Department, Washington, D. C.

PRINCIPLES, KNOWLEDGE, ATTITUDES, AND SKILLS INVOLVED

1. The children as a group acquire some ability to plan and work out an activity.

2. They take responsibility for providing some material for their booklets and for the play post office.

3. They acquire some ability to take care of, sort, organize, and make use of their stamp material.

4. They acquire some ability to be neat and orderly in pasting material in their booklets.

5. They acquire some ability to get along with each other, share their own materials with each other, and share school materials.

6. They acquire some understanding of how mail is handled and of how the post office serves people.

7. They acquire some knowledge of what to do with other people's mail and the attitude that one's mail is his own personal property.

8. They acquire some reading readiness. They acquire new words for their vocabularies and learn to express themselves more clearly. Some children make signs. Many children learn to sort their material and match it with other children's material. Most of them can recognize different kinds of mail and what is wrong and what is right on envelopes.

9. Many children actually learn to read the numbers on stamps and many of the signs used at the post office.

It cannot be too strongly emphasized that only with thoughtfully directed use by the teacher of opportunities for stimulating intellectual development can an appropriate program be achieved. If the teacher emphasizes this development at the expense of some others, if, for example, a child is overstimulated or overchallenged, the whole purpose of the program is lost.

The teacher needs to display the same intellectual habits she is trying to encourage in the children. She must accept the fact that she cannot wholly rely on her stock of information. The processes of gathering materials, of gaining first-hand contacts, and of explaining the resources of the com-

munity are time-consuming but indispensable. Important factors in determining her awareness of teaching opportunities and use of them are her own information and interests. Over and above this she must be able to see situations from the point of view of the children and make judicious use of opportunities to satisfy and develop the child's thought, interest, and information. In other words, she takes appropriate advantage of environmental opportunities, keeping in mind individual differences and maintaining a balance of stimulation from the standpoint of the child's whole development.

VIII

Language and Speech

To express oneself easily and well and to enjoy doing so is a tremendous asset. Moreover, inadequate development of this ability has a widespreading effect on the rest of the child's development, affecting his ability to understand, to clarify his thinking, to maintain his part in a social group, and to be a well-adjusted individual.

Specifically, the objectives for the school in the field of language and speech are as follows:

It is desirable for an individual:

1. To have a vocabulary of good quality, that is, the words used are accepted as exemplifying good usage as opposed to slang, "street phrases," or decidedly colloquial terms
2. To be interested in learning and using new words
3. To use correct grammatical constructions
4. To be able to express himself clearly
 - *a.* To use discrimination in the choice of words
 - *b.* To organize words effectively
 - (1) To speak to the point
 - (2) To hold to the subject
5. To have the ability to take part in a group discussion without being self-conscious and to speak easily to adults. This aim at the adult level is that of being able to talk before a group.
6. To have a characteristic voice quality and intensity which are as pleasant as possible
7. To enunciate as clearly as is customary at the age level in question
8. To have as few speech anomalies as possible

Because of the extremely wide range in language ability which may be found even among children of the same chronological age, it is not feasible to name any practices as peculiar to any one group. The aim for each child is to help him progress in his use of language and to consider his language ability in relation to his whole developmental picture. In addition to age, vocabulary, articulation, grammatical construction, sociability, and intellectual ability are only a few of the variables which determine procedure. Each child is considered in the light of his needs. However, to a certain extent, practice will depend upon whether a child is just learning to talk, what his talking habits are, how he will be affected by direct and indirect methods, and how rapid a change is necessitated. For example, the problems of a consistent articulatory defect in a five-year-old child will undoubtedly differ in significance, influence, and ramification from those of a three-year-old child manifesting the same difficulty.

In general, the emphasis in the child's first two or three talking years is on encouragement in talking, in expressing himself, in experimenting with words, or, in short, in acquiring language as a tool. Since the child is just learning, it is to be expected that he will make mistakes and will be inept. Consequently, an attempt is made to give him good models to copy and to foster his own confidence in his ability without making him overconscious of himself while talking. At this age, mistakes and imperfections are disregarded with the thought that they are of a temporary nature, that practice will probably result in disappearance, and that under any circumstances the risk of making a child conscious of his speech by frequent attention to his mistakes should be avoided. On the other hand, the five-year-old child who is unhappy in his ability to express himself, through trouble either with articulation, with vocabulary, or with word construction, is presented in a different light. He may have been exposed to good models but shows little evidence of his awareness of them, a fact of importance in itself. He may have been encouraged in infantile speech; he may be overwhelmed by having to talk. Whether one of these or any one of many more

possible explanations be the right one, the fact remains that his social and educational problems are thereby considerably complicated. His schoolfellows are or soon will be conscious of his peculiarities; he himself is or soon will be aware of them. In either case, the effect is undesirable. Moreover, upon embarking on the many activities related to language in the early elementary school years, he will be suffering a handicap. It is of great importance that these facts enter into decisions as to proposed steps in regard to this child's language development, and in many cases it is thought unwise to "play a waiting game." To discover the underlying causes and in some cases to treat not only them but the symptoms is a frequent procedure at this age.

Particular effort is made unobtrusively to provide conversational situations both with adults and with other children for the shy, reticent child and for the child who does not talk so easily or so readily as others in the group. Where such behavior is characteristic of a younger child, care is taken that many of the child's wants are not anticipated but that he finds it necessary to ask verbally for what he needs or desires. A special effort to speak distinctly and care to use the simplest expressions characterize the teacher's own speech with these children. At a somewhat more advanced level, the teacher helps a timid child by asking leading questions which may be answered in monosyllables; for example, "Did you want to tell me about your new dress? Did someone give it to you?" etc. Later, as the child advances in freedom of expression, the teacher states her questions in a way which stimulates a lengthier reply; for example, "Tell me about your dress." When a child shuns other children and follows the teacher, the teacher frequently starts a conversation with another child, striving to draw the shy one into the activity and thus into the conversation. She takes special care that he receive notice in a group discussion and that he be given opportunity to make his contribution.

In a normally stimulating environment, contacts between the children are a means of encouraging language activities. The carrying out of cooperative projects, the response to

requests, the working out of conflicts, individual conversation, and group discussion awake expressive desires and effort in a child. Also, all aspects of the school program which involve new vocabulary, ideas, and talking possibilities contribute toward language development.

Patterns of speech, new words, and new modes of expression are provided in the environment by the teacher's speech. Teachers in all the groups provide opportunities for conversation between children and adults. The teacher tries to have some purely conversational contacts with the children in her group, not limiting the remarks she makes to comments about their behavior or to suggestions and requests. Much of her conversation with the children may be for the purpose of stimulating their curiosity, giving information, helping them to find answers to their problems, and so forth, but she also spends some time in "chatting" with each child on his own level. Any conversation which a child starts with an adult is given interested attention.

Other opportunities for hearing language are provided through group discussions with the teacher (this applies more commonly in Third Group and Junior Primary than in the younger groups), through listening to her tell of some happening or some subject of interest, and through listening to stories and poems. The same experiences may be utilized to call forth from the children comments, discussion, imaginative speculation, dramatic activities, and subsequent activities which will mean language participation.

A special effort is made to have all the children participate. The teacher may guide by asking questions, giving some description, or telling some short anecdote which she thinks will encourage comments and discussion. She watches to see that the discussion is not monopolized by a few children, and she may have to take special care to give a reticent child opportunity to make his contribution. To some extent the teacher suggests that it is desirable to take turns in talking, to listen to what someone else has to say, and not to interrupt when someone else is conversing. Much more stress

is laid upon these points in the older than in the younger groups.

To further this type of activity in the five-year-old group, these children are made to feel a satisfaction in bringing things to school to show the other children and the teacher. A favorite book, a souvenir of a trip that he or some one in his family has made, a science specimen, or anything of interest to others makes a good subject for a child to talk about, and each morning some time for such activity is given. Many children need a little help in the way of leading questions, but once the ice is broken the group itself will furnish interesting questions and comments which will help the child to forget himself. Such situations as well as the experience of composing a daily newspaper or writing a letter as a group offer opportunity for teaching clear and correct expression in the oldest group. If the teacher accustoms the children to her writing of their comments as a regular part of the procedure and then, also regularly, reads these to the group after the child has finished, she can further an objective attitude lacking in self-consciousness. The children in the group will see possible improvements in form and grammar, as will the child when he hears the same words from another. Hearing the remark or composition as a whole also makes possible the asking by the teacher of such questions as, "Is there anything else you would like Mary to tell you?" "Are there any questions you would like to ask?" "What did you particularly like about her talk?" "Do you think she could have told it better?" In fact, in the two older groups and occasionally at a younger age, the children themselves constantly serve as critics for each other, for they are quite aware of mispronunciations and wrong word choices in the conversation of another; they seem far more sensitive to correctness in form than do younger children.

However, the teacher herself is the significant factor in promoting the child's language development in school. Her own sensitivity to shades of meaning, her discrimination in the use of words, the variety in her own vocabulary, her ability to express herself interestingly to the children are important

parts of the child's language environment. Over and above this, her ability to utilize experiences to stimulate language, and to broaden the child's contacts, her awareness of the child's needs, her judgment concerning appropriate times to help him are of great significance. She realizes that under some circumstances absolute comprehension by the child of her meaning is essential, and she will adjust her vocabulary and sentence structure to a sufficiently simple form. Such situations are those in which a child is trying to learn a procedure, when the teacher is giving an explanation, or when she is making a suggestion, especially one she expects the child to carry out. Otherwise, she particularly tries not to "talk down" to the children in that she can stimulate their curiosity, interest, and learning by introducing new vocabulary or forms of expression. She does attempt, however, to utilize well-known synonyms to aid in conveying her meaning to a child.

Knowing when to correct a child's language and when to accept it without comment is a real problem for the teacher. In part, she is helped by knowing whether the error is habitual, how easily a child may be inhibited by comment on her part, how significant a part his language plays in other phases of his development, and what language encouragement the child receives at home. Her corrections, if made, are made casually, for she wishes to be sure the child has abundant opportunity to hear correct usage. Usually a teacher makes corrections in grammatical form and in word pronunciations more readily than she does in the case of articulatory mistakes, in that the former are probably more occasional. In Junior Primary correction of simpler grammatical errors, such as wrong use of personal pronouns and tenses, is common.

Articulatory defects are usually ignored until the child is at least four years old and in most cases even longer, depending on the child's ability to make himself understood, his awareness of his difficulty, any tendency to embarrassment, and the attitude in the home. An analysis of the difficulty is made by an expert in speech correction and the advisability

of individual remedial training discussed with the teacher. Ordinarily such work is not done before the child enters Junior Primary.

Speech defects of a stuttering nature constitute an entirely different problem. While in this school such cases are referred for special study, certain principles of controlling the school environment are followed. In outlining them, it should be pointed out that they are designed to apply to the child of preschool age.

When a teacher first suspects that the child's speech is somewhat repetitive, she begins to observe carefully the nature of the situations in which these manifestations occur and the evidence of excitement or nervousness in the child while they occur. This step is taken in order to report this to an expert or to aid her own analysis. She remembers that a certain amount of repetition is natural in a young child who is learning to talk, who is experimenting with words, and who is having some conflicts between his abilities to express himself and to make others understand him.

The teacher's whole attitude is matter-of-fact and unconcerned and, so far as the child knows, undirected. She knows that the worst possible result of her interest would be the child's awareness of her attention or any concern on his part over his own speech.

The child's behavior at home and his home environment as well as his general physical condition and his articulatory structure are vital parts of the picture, and the speech expert and the teacher both contribute what they can to help the parent and to make possible a thorough analysis of the child's whole environment. It is particularly important that the parents do not show their concern and take no direct steps so far as the child is concerned. Adjustments are made in the environment in order to approach the child indirectly.

The following suggestions are usually helpful for both school and home. An environment which is as routinized as possible, requiring relatively few adjustments on the child's part and as little confusion as possible, is helpful. The child

needs security and affection. Frequently a stuttering child needs more legitimate attention than he has been getting. The child needs a calming environment. Perhaps those around him should speak more slowly and move more slowly, if their customary reactions are more rapid than the average. It may help the child for some one to read aloud to him. Since stutterers seldom have difficulty when they are talking with some one else, to talk or recite in chorus may be helpful. The child is never asked to repeat a statement nor told to speak more slowly. Anything which may remind him that his speech is abnormal, such as teasing, ridicule, or direct training, is taken out of the environment. Treatment is carried out casually through the environment, not directly.

The matter of lateral dominance, indicated in part by handedness, may be an element in the situation, but aside from making sure that no hand preference is being imposed on the child, the consideration of such matters belongs to the expert.

IX

Guiding the Child's Personality Development and Social Behavior

Emotional Stability and Control

The normality of a child's emotional responses, his emotional poise and stability, are fundamental to all his activities. Children who have many fears, who shrink from contacts with life, who are easily excited, living at high tension, or whose emotional responses are exaggerated, illustrate a few of the ways in which behavior betrays a substratum of conflicts and stresses which are far-reaching in their effects in the child's development.

It is not desired that the child be a perfectly controlled individual or one who has no emotional reactions to his environment. Either would be abnormal. Rather, the aim of those guiding the child is that he be free of emotional manifestations abnormal in number or degree. Furthermore, the removal of the actual overt symptoms such as, for example, abnormal cruelty, unusual craving for attention, or fear of the unfamiliar, is of primary concern only so far as these disappear because of the removal of their underlying causes. The important achievement is that the child be ready to face life unhandicapped by fears, attitudes, or responses which will interfere with his subsequent development and satisfactions.

The teacher's task is an extremely delicate one, for each situation of the day has its aspects in this sphere of develop-

ment. Every activity and every experience has its forerunners and consequences in attitudes. In addition, the behavior of the child is so affected by his home environment and physical condition that the school cannot proceed far without taking these into consideration. However, the school's part in fostering the child's emotional stability is extremely important.

The teacher tries to provide an environment which is not provocative of emotional upsets. However, the child must learn to face difficulty and adversity and must have experience in doing so. In the school there are opportunities for each child to be active in the pursuit of satisfying occupations, but there is also opportunity for quiet if this is advisable. The elimination of irritants caused by insufficient or poorly apportioned space, by paucity of materials, or by too many materials, is important. A child is protected from others who intentionally or unintentionally annoy or overstimulate him. Equipment which operates inefficiently, which is too much beyond the ability of the child, or which is spaced unwisely, may be inhibiting and is avoided as much as possible. Inappropriate scheduling of activities so that inactive or active ones are bunched rather than spaced throughout the day would be unfortunate, as also would be unwise combinations of simultaneous activities. Too little consideration of individual differences is highly undesirable in that the result may be too much or too little stimulation of a child. Also unfortunate are too much guidance or too little guidance on the part of the teacher. The terms "too much" or "too little" and "approximate" are admittedly vague; the teacher can only control the environment to the best of her ability, and in lieu of more definite measures the child's behavior must be the indicator or a clue to the fact that some environmental readjustment is needed.

As is mentioned in the preceding paragraph, it is unwise for the child's existence to be too unruffled. While it is highly undesirable for him to encounter too much discouragement from his failures with materials or from contacts with others, it is also inappropriate to give the child too little opportunity

to exert himself in the face of difficulty. This may be looked at from the standpoints of both mental hygiene and learning, for the child not only learns how to meet adversity but also improves his abilities and acquires new skills and knowledge by working from failure to success.

Another perplexing problem to teachers of young children is the amount of emotional self-control to be encouraged in the child. The following statement summarizes one point of view: It is advisable for a child to meet enough problems so that he will be sufficiently challenged to learn and so that he will learn techniques of meeting difficulties acceptably. At the same time, it is not best for him to meet so many that he becomes discouraged, overfatigued, or highly excited. Provided these conditions are met, he should learn to meet difficulties without being emotionally upset and uncontrolled in his behavior. Because the average five-year-old child is more understanding of the meaning of control and is more able to act on a reasonable basis, more responsible behavior may be expected of him than of a two-year-old. Between the two levels a wide range of behavior is reflected in the teacher's expectations as the child develops.

In this field of the child's development, as well as in others, those working with the child are well aware of the positive approach; that is, they attempt so to guide the child that desirable behavior will be fostered. While it is true that "behavior problems" may more ostensibly command the teacher's attention, it is hoped that in her control of the environment for each child she is maintaining a constructive point of view. Moreover, by providing opportunities and activities in keeping with the child's abilities and needs and by being keenly alert at all times, she is trying not to create situations potentially productive of undesirable emotional consequences. She considers each child as an individual, taking cognizance of all phases of his development and of as much as she knows of his environment. She gives him her attention as an individual. She tries to give a feeling of security in an awareness that he has her sympathy, understanding, affection, and interest.

She attempts to help him develop without overstimulating him. Nevertheless, she also knows that too little stimulation may be as unfortunate as too much. She gives the child opportunities for success and protects him from too much frustration and failure.

On the negative side, that is, concerning problems in behavior which need modification, it is difficult to generalize. The behavior itself is not so important as its underlying causes. The latter can be determined only in relation to a study of the specific child and his situation. The teachers at school and the parents at home need to observe the child carefully under different conditions in order to be as objectively informed as possible. For example, perhaps a child is unusually anxious for attention because he does not feel entirely secure concerning some aspect of his environment. The need on his part may have many widely different manifestations; he may be negative in many reactions, he may be cruel to other children, he may consistently and deliberately disregard the teacher's suggestions, he may be overly demonstrative of affection, or he may constantly "show off" before strangers. Any one or several of these and other typical behavior characteristics may be due to the above-mentioned underlying causes. The behavioral symptoms are not of first importance in themselves so far as the child is concerned, although the specific behavior, if it affects other children, needs to interest the teacher and complicates her problem. It will not be the teacher's primary aim to see that the child does something else rather than talk to visitors, or that he complies with her requests. Rather, she is concerned to know why this behavior is occurring and, by trying to find wherein the insecurity lies, how to remedy it. Her study of the child and his home and school behavior should be of help. Only when the manifestations gradually diminish, following adjustments in the child's environment, can the teacher feel that the issue is being met. Temporary methods to protect the group may be necessary, but they are recognized as such, and the child's problem is attacked more fundamentally.



Objectives in Regard to the Child's Social Behavior

The preschool offers opportunity for the child to have a variety of contacts with other children of approximately the same maturity and with understanding adults. These adults, furthermore, are guiding the child's personal behavior with definite objectives in mind. Generally speaking, these objectives are the same for all the groups. There may be differences in the standards from younger to older groups, and consequently in the importance attached to deviations from these standards, as well as in the amount and kind of emphasis placed upon each objective.

It is desirable that the child participate in group play and take advantage of opportunities to have social contacts with others of his own age. On the other hand, he should not depend too much upon others for entertainment or enjoyment but be able to work or play alone and enjoy doing so. There should be an appropriate balance between sociability and independence. The manner in which the child participates in the group and the role he plays in it are important.

Ultimately it is helpful if a child can both contribute ideas to a group and direct a group in an acceptable way. He should be able to secure the cooperation of others, take his turn in letting others participate, and follow willingly at times. It is hoped that he will maintain a balance in the roles he plays in a social group so that he is neither a constant leader nor a constant follower but a truly cooperative member.

Cooperative behavior requires an understanding of personal and property rights. The child needs to be able to distinguish between his own and other people's belongings, to understand and defend his own rights, and to respect the rights of others. Possession of such understanding furthers the attainment of another objective, that of being able to accept appropriate individual and social responsibility.

There are certain attitudes characteristic of the social relations of the well-adjusted child. He is friendly, generous, sympathetic, reasonably affectionate, and not often jealous or sulky.

Additional objectives may be stated concerning the child's contacts with adults. These are, on the one hand, justified confidence in the teacher and acceptance of her interest, leading to appropriate responses to suggestions and requests. On the other hand, self-reliance and independence, including normal independence of praise and attention, are desirable. It is hoped that the child will be at ease in his contacts with adults and will be neither self-conscious nor withdrawn.

Further, there are certain personal characteristics which, while they are not primarily social responses, affect the child's adjustment to his environment and, indirectly, his relations with other people. One of the chief objectives in this regard is that the child be emotionally stable. He should be able to "face reality"; this involves an ability to criticize himself at appropriate times, to recognize his own part in failure, and to accept failure as encouragement to further effort which, if unsuccessful, is faced effectively. Also involved is the ability to accept success objectively.

It is desirable that the child possess an effective sense of humor, that he be genuine, that he have a wholesome outlook on life, and, finally, that he experience joy in living.

Activities Particularly Effective in Furthering Social and Emotional Development

Watching

Watching is important to social development because through it the child may learn much about his environment. He may learn how to perform a skill; he may learn various social techniques and observe their efficacy; he may learn group rules; he may learn the characteristics of persons in his environment. Watching is often the initial step toward participation and at the early ages seems to be one of the first stages in social behavior. There are, of course, individual differences. Within groups there are some children who do more watching and less participating than others; some children find participation with others difficult.

As the children grow older, increasing emphasis is placed upon their participating with others rather than watching others. In the youngest group, although there is every opportunity for activity, it is natural that there will be frequent periods of watching and there are provisions to make it possible. Most of the activities in Junior Primary are carried out as a group or within groups, but in many instances watching receives specific encouragement as a means of finding out how to do things.

Talking

Conversation among the children and with the teachers is encouraged as a means of social intercourse. In this connection the objective is a twofold one: it is desirable for a child to use language to express himself and for him to speak in a pleasant and friendly way.

Children are encouraged to use language to secure social cooperation. The teacher may say, for example, "He doesn't understand what you want when you cry. Talk to him," "Explain what you wish to do," or "Tell him that you do not want to help. He doesn't understand unless you tell him," or "If you want her to put the wagon there, you will have to tell her so."

A teacher endeavors to discourage children from whining or from shouting harshly at one another, pointing out how much more pleasant a friendly voice is and how much more effective it is in securing what one wants. In doing this, she tries to choose her opportunities judiciously so that she will not seem to be nagging or to be "keeping after" the children. Her own manner of speaking and her voice are real factors in the situation. She may commend a child who patiently keeps his temper when another child has annoyed him. If a child comes to her whining and complaining, she may say, "I can understand you better if you will tell me about it without crying." To a child who is talking loudly to another, she may say, "If you ask him or tell him kindly, I think he will be more likely to do what you wish," or "Mary has left you because you spoke so crossly to her."

With the younger children, it may be in part the interference of the teacher in the situation which is the factor making another child amenable to suggestion. However, children gradually learn that unpleasant ways of speaking are neither acceptable nor effective and that speaking in an angry and harsh manner may facilitate annoyance and loss of patience in one's companions.

Occasionally a conversation may degenerate into nonsense or into a competition in making derogatory remarks. A certain amount of nonsense, if it is good-natured, is wholesome and humorous and frequently relieves tension. If the derogatory remarks are brief and not in danger of causing hurt feelings, they are probably best disregarded directly. The teacher soon makes sure that the children have something to do and directs their attention by introducing other topics of conversation or suggesting further activity. Sometimes in the older groups such remarks may spread rather contagiously and take the place of other conversation. In such instances, besides suggesting new activities, the teacher may explain that such conversation is undesirable because it is unfriendly and unpleasant to hear.

It may sometimes be necessary for the teacher to discourage conversation if it occurs at an inappropriate time, such as at rest period or when it interferes with accomplishing a purpose. The teacher may, for instance, remind a child that he may not be finished in time for the next activity. A child may attempt to initiate a conversation with the teacher in order to effect a postponement. The teacher may answer briefly and remind him matter-of-factly of what he has to do.

A child who is having difficulty in adjusting to the group may prefer conversation with the teacher because he wishes attention; he may seem unable to adjust to the other children or to find his own activities. In such instances, the teacher may gradually diminish her contacts, meanwhile helping him in other ways to adjust to the group and to find some activity which will absorb his interest.

The teacher's own use of language as an aid to the child's comprehension of social situations should be mentioned. She

is careful to make her explanations direct and simple. It is particularly important that they be short. It is futile to use complex sentences liberally sprinkled with conjunctions, for the young child will soon lose the trend of her thought. It is true in general, however, that the more mature the child the more readily he will comprehend verbal explanations.

Cooperative and Dramatic Play

The complexity of cooperative play varies in type and in amount from group to group, within any one group from individual to individual, and even from one type of activity to another. In the two-year-old group, social contacts are relatively brief and simple. This is particularly true near the beginning of the school year. One child may pull another in a wagon, or two children may play together in the sand, exchanging cups and molds, but these contacts are rather short and seemingly haphazard. As children grow older, social contacts are of longer duration and more truly cooperative. As dramatic play increases, children assume definite roles and the play acquires more purpose and focus. In the older groups, a much larger proportion of time is spent in cooperative play. Dramatic play is often highly organized and the same activity may continue over a period of days.

A teacher encourages children to participate in group play at their own levels of maturity, and yet she is keenly aware of the fact that there should be a desirable balance between sociability and independence. A child is not encouraged to engage in group play at the expense of opportunities to play alone. Both the shy child who avoids groups and the child who constantly seeks out others are helped to make more balanced adjustments.

The teacher makes special efforts to enable the very shy and seclusive child to enter group play more easily and confidently. At the beginning of the year, he is given plenty of opportunity to become familiar with his surroundings and to observe the other children. She helps him find activities which will absorb his interest, but she does not force him into group play. She tries to give him security through a feeling of famili-

arity. As the child becomes more at ease in the preschool environment, she attempts to increase his self-confidence and to provide situations where he engages in cooperative play that is not too demanding. She may so arrange the materials he is using that he ear other children. She may suggest that he join other ren in some activity so that several children with sim erests are playing together where no complex type ation is demanded; for example, a child may be e sandbox, where each child is playing more or less . The teacher to some extent avoids pairing such a child ne who is inclined to be aggressive. She tries to give him in idual experiences that will give him a feeling of confidence i group activities. She may, for instance, give him special at ention in some constructive activities or specific experiences or information. He may thus have something he can talk about or something he can do which enables him to make a special and individual contribution.

Sometimes the teacher may help the shy child by asking him to assist her and another child. For instance, even though such a contact may last but a moment, she may ask help in moving the teeter-totter into a new location and then suggest that the two children play on it together, or she may suggest that the child aid another in lifting a wagon over an obstruction. She may occasionally give him confidence by asking him to show another child how to perform a certain activity, such as demonstrating how to climb into the trapeze. Or she may say, "John, don't you and Edward need a conductor for your train? Martin would be a fine conductor." She tries to have the child feel that there is a place for him in the group.

It may happen that two children will play with each other to the exclusion of other members of the group. In such instances, the teacher arranges schedules and activities so that they have less opportunity to be together. She may guide them into different story groups, or arrange that one begin a routine well ahead of another. She may try to interest them in different simultaneously occurring activities. Meanwhile she helps each to join other children and furthers contacts

other children so that these will be as pleasant as pos-
She may also suggest or arrange materials so that both
will join larger groups and will ask others to play
them. She does not separate them rudely, however, or
them from having any contact with each other. She
to have them make other friends as well.

Occasionally it is necessary to use similar procedures if
children are overstimulating each other to the extent that
play has become too exciting, fatiguing, or purposeless.
The teacher considers it desirable that each child have an
to play different roles in group play, to be some-
a leader and sometimes a follower, not taking any one
to the exclusion of another. The natural course of events,
turns, playing different parts in dramatic play, and
in responsibilities or in demonstrating a particular
usually provide sufficient opportunity for
child to act in various capacities. At times, however, it
necessary for the teacher to help some children to secure a
favorable balance between the roles they play in the
A child is not discouraged from leading if he has the
so long as he leads in an acceptable manner. This
that he will be willing to listen to suggestions made
by other members of the group and will be a cooperative follower at times. He will be able to recognize a good suggestion and give up his idea or plan in favor of a better one.

It is hoped that the child who leads will not become unpleasantly aggressive in the way in which he controls the group. The teacher may guide him indirectly by suggesting the substitution of more acceptable methods and by encouraging him in listening to the ideas of others; in the case of older children, she may attempt some explanation of the reasons why others do not cooperate with his plans. Often other children will intervene to prevent a monopoly of the leading role. Others equally aggressive may insist on the adoption of their suggestions or they may refuse to play with the child. If the child is excluded and avoided by the group, the teacher helps him to see why and makes sure that he has other op-

portunities for leading. She helps him to learn how to lead more acceptably and how to follow willingly so that he may become a truly cooperative member of the group.

The child in the older groups who seldom takes the initiative and who lets himself be ordered about may need special help. If the teacher notices that such a child has timorously or hesitantly made a suggestion which is at the moment ignored by the others, she may encourage the group to adopt that suggestion or encourage the child to speak up more emphatically. She lends him her support, as it were. For instance, she may say, "That was a good idea that John had. Tell them again, John," or "I don't believe they heard you, Margaret. Say it again and tell them what a good plan you have." If the child seems to be giving in too easily, the teacher may say, "Tell him that you don't want to do it. Speak firmly so he will know that you mean it." At other times the teacher may give a reticent child more self-confidence by asking him to be the leader in some game, or by entrusting a responsibility to him, or by asking him for an opinion or for suggestions as to how to solve some difficulty.

The aim is by no means to make leaders of all children or to eliminate followers. Rather the aim is to develop in each child the ability to cooperate with others. In those activities in which he tends to be a leader, he should use acceptable methods; when he is a follower, he need not be overly submissive. The desirable relationship among the children is not a constant dichotomy between domination and submission, but a give-and-take interplay.

Often children imitate another's activity, and this type of following is, on the whole, encouraged rather than discouraged by the teacher so long as it does not become purposeless or so frequent that individual initiative suffers. A child may make the clay "snakes" which seem so attractive in the hands of his friend or may climb as he sees another do. He may start to make a road like another child's and continue to develop a series of roads and bridges and tunnels. A child receives suggestions for activity through other children as well as

through the teacher. It is possible that when a timid child may start to do something he sees other children doing, the same suggestion coming from a teacher might not interest him.

If a child imitates another's undesirable behavior, the teacher discourages him by explaining to both why the behavior is undesirable and suggesting that they turn to other activities. If one blames his behavior on the other, she may say to the child who is imitating, "You know, yourself, what should be done."

Occasionally the children compete with each other with such remarks as, "I am beating you. I can finish before you do," or "I beat you. I beat you." Usually such remarks are apparently ignored unless speed is undesirable or unless antagonism seems imminent. The teacher may say, "There is no need to hurry. We have plenty of time," or "If you go slowly, you may do it better." If there is some value in finishing promptly, she may say, "It doesn't matter which one of you finishes first if you are ready in time for lunch," or "If you work busily, it doesn't matter at all which one is through first." The child should not feel a necessity for strain in order to surpass another child. Situations in which there is any especial advantage coming to "the first one" or the "one who beats" are carefully avoided, except perhaps in a few games among the older children. If two or more children are of equal ability and the rivalry is initiated by the children, the teacher may not interfere. She does not initiate competition. She is alert to see that the child who loses faces his failure effectively, as well as that success does not rest too flagrantly on the shoulders of the winner.

One of the most frequent and typical of cooperative activities among the older children is dramatic play. Any elaborate and long-continued organization is relatively rare among the two-year-olds. A "mother" may put the "baby" to bed and cover her up. A simple train of two boxes on a plank may occupy three or four children and involves no greatly differentiated activities. In such instances, leadership is apt to be definite and there is not much planned cooperation. Such

play is brief and simple. Also, the two-year-old plays imaginatively by himself. He may be a bear, or a policeman, or a bus driver, but relatively seldom do others actively cooperate with him by assuming other imagined roles.

As the children grow older, however, dramatic play increases in proportion and complexity. More or less well-defined roles will be played by each child; one may be the grocery clerk, another the delivery man, and several others the customers; there may be a mother and a father with several children and a grandmother and, sometimes, aunts and uncles. Among the oldest children such dramatic play often continues for days, and usually the roles must be played "true to life." It is not unusual to hear one child say, "But you can't get up and go to school; you're only a baby," or "I said, 'Stop,' and I'm the traffic cop. When the traffic cop says 'Stop,' you have to do what he says." One child who was annoyed because another kept riding his tricycle across the corner of the lawn which was his "house," shouted, "Say, does your father drive his car on the grass?" "No." "Well, then, stay on the street where you belong."

Such organized play provides excellent opportunities for playing different parts, for learning to follow suggestions, and for adjusting to the demands of the group. In this situation the "rules" and accepted procedures are a part of the game itself. It is the teacher's concern to see that no one character is monopolized by an individual. It would be undesirable, for instance, for a rather shy child always to be "the baby" and to be constantly told what to do by the more aggressive "mother." In guiding the children in such play, the teacher tries to enter the spirit of the game, for then her suggestions will be more sympathetically received and her interference will not interrupt the course of events. She makes her suggestions in keeping with the situation. Thus she may say, "Perhaps the baby is growing so big that she is ready to go to school now. She is big enough to do many things for herself," or "Sometimes the 'boss' has to go away on a business trip. He leaves an assistant in charge who tells people what to do," or "You might have a baker who makes doughnuts and

Carl is an excellent doughnut maker." or "Is the house big enough for any more uncles and cousins? It would be lucky if some of those uncles were carpenters and could build another house."

Groups in Which the Teacher Participates

Opportunities arise during the daily program for the children to have experiences as members of more or less well-defined groups organized for a particular purpose. At the younger ages these groups arise more or less spontaneously. The teacher may enter the group momentarily to direct the children's attention and the conversation along lines that she believes will be particularly valuable. Some of the younger children are usually together for stories and for music, but always the groups are small and loosely organized; the children are free to come and go as they wish.

For the four- and five-year-old children, group discussions and activities are more frequent, unified, and controlled. They often occur in relation to some activity which continues over several days and which is in part fostered by the teacher's foresight. That they do occur is due to the fact that the teacher provides opportunity and favorable circumstances. It is believed that these children are ready to benefit from a real group discussion, to listen to what others are saying, and to make and evaluate suggestions. Because the older children, particularly the five-year-olds and, to some extent, the four-year-olds, are ready to give attention as members of a group for longer periods of time than is true in the younger groups, the formation of such groups may be less elastic, and the children may all be expected, at times, to remain together until the discussion is over. The older children also meet in groups for stories and for music, and sometimes there are organized games and organized dramatic play.

Situations Involving Personal and Property Rights

To be able to adjust satisfactorily in a social group the child must have a clear understanding of personal and prop-

erty rights. These rights are definitely stated in a sufficiently simple form so that the child may acquire an understanding of them through consistent and practically invariable application. At times one child's rights may conflict with another's and then some adjustment must be made; at times an exception is advisable in the light of other circumstances. When adjustment and reinterpretation of these principles are demanded, the teacher makes sure that the child understands upon what basis the modification is made and why it is necessary. For example, a child is deeply engrossed in making a worth-while block construction; he may have been using the blocks for nearly half an hour but is still not quite through. A second child arrives on the scene and wishes to use these particular blocks. He may appeal to the teacher, saying, "David has been using those blocks a long, long time and I want them now." The teacher decides that even though David has monopolized the blocks for some time it would be unwise to interrupt his work and to prevent him from accomplishing his purpose. Perhaps he has never before remained at a task so persistently and the teacher feels he needs to have experience in following through an activity to its finish. Thus, on the basis of her insight and knowledge of the needs of the children involved, she encourages the second child to find another activity. She makes clear to both children that she is making an exception in this case and that she is sure they understand that there is a reason behind her decision.

As occasions necessitate, the "rules" are explained carefully in such a way that the children regard them not as laws imposed arbitrarily but as procedures that have been decided upon for the good of all concerned. She avoids saying, "We don't do that in preschool." To do so might well imply to the child that such behavior is approved elsewhere or that such an explanation is eminently sufficient, regardless of reason. Rather, she explains why the behavior is undesirable. For instance, she may say, "There are not enough wagons for every child so we take turns," or "If you use all the clay, then Jack can't have any. There is plenty for both of you."

In general, it may be said that the child must learn to know what his own rights are, when to defend these rights legitimately, and how to do so in an acceptable manner. He must respect these same rights when they apply to others.

Since unlimited quantities of equipment and materials are not available, many of these understandings will center about the use of property. The child learns that the preschool equipment does not belong to any one individual but is for all the children to use and that, since there are not unlimited quantities, it is necessary to share and take turns. The child is taught that when some other child is using a toy, it belongs to that child for the time being. If he wishes to use it, he must ask that child's permission and, if the latter is not ready to give it up or to share it, he must wait for a time. The teacher may say, "Sally is using the doll carriage now. You may have it when she is through. Why don't you find something else to do while you are waiting?"

Although a toy belongs to the child who is using it for the time being, the child is taught that he may not monopolize material for unreasonable lengths of time if others are waiting for it. The teacher may say, "Jane has been waiting a long time. You should let her have the truck now. You have been playing with it for a long time." Often the teacher has to judge arbitrarily how long a time the child may use material if others are waiting for it. However, she suggests a way of measuring time which is comprehensible to the children and which they can apply themselves. "A little while longer" or "in a few minutes" may mean nothing to the child. Instead she suggests a scheme that will be meaningful to him. For example, the teacher of older children may say, "After two more rides around the sidewalk it will be Marjorie's turn" or "It would be fair to let each one of you climb up and jump down three times, and then it will be the next child's turn. Let's count the times so that you will know when your turn has ended." Sometimes in the older groups the teacher may use her watch and point out to the child that it will be time to put the blocks away when the hands get to a certain place.

At one time the teacher settled a dispute about the length of time the children could use a new trapeze by putting a three-minute sandglass where the children could see it. As each child started he turned the glass. He left the trapeze when the sand had run through. In the younger groups a simpler statement is needed, such as "Your turn will be over when you have reached the tree" or "When the bucket is full, it will be Jean's turn."

The children are, of course, encouraged to share their toys. Cooperation is often suggested. The teacher may say, "Ann is using the wagon now. Did you ask her if she would like to have you push her? You could use it together that way," or "Perhaps you could help Robert to make a house with those blocks." If, however, the other child does not wish assistance or prefers playing alone or if the material does not lend itself to cooperative use, the teacher suggests that the child find another activity until whatever he wishes to use is available.

The teacher encourages the children to take turns whenever the material permits that type of sharing. She may say, "Now it is John's turn to use the sled; first Mary, then John, and then Billy. If you take turns you will all have a chance to slide." The children are helped to share and to engage in cooperative play at the same time.

The child is not permitted to monopolize equipment or space which others could be using at the same time. For instance, the teacher may say, "There is plenty of room for several children to climb there. That is not just for one child. It is for anyone to use," or "That is not just your slide, Bobby. It is for all the children to use. Roger and David and Barbara can slide too. You can all take turns."

The child also learns that when he leaves a toy and starts to play with something else, he has indicated that he is through with it and that others are free to use it. If a child, for instance, has left a shovel and has gone to climb on the ladders for a while and then comes back annoyed because some one else is using the shovel, the teacher may say, "But you left the

shovel, Jimmy. You were climbing on the ladders. When you leave a toy for something else that means you are all through with it. Now you will have to wait until Carl is finished."

Occasionally a child may leave a piece of equipment temporarily, while he goes to get something else, for example, or while he goes to the toilet. In such instances the teacher may have to help him explain to another child that he had not really left the toy. It is considered legitimate for a child to ask the teacher or another child to "save" a toy for him during a brief and necessary absence, but it is not legitimate to hide toys away or to ask some one to guard them for future use while one engages in a totally different activity. A combination of pieces of equipment is, of course, possible until it amounts to monopoly of space, time, or equipment.

Occasionally the children bring toys from home. It has not been practicable to formulate any general procedure to follow in such instances, for there are both advantages and disadvantages to this practice. Sometimes a child may bring a very interesting toy or object which will provide a valuable opportunity for him. The teacher may ask him to keep the article in a safe place until she arranges sometime during the session for him to show it to all the children. Often a shy child may thus be encouraged to speak before a small group, for he will feel that he has a real and individual contribution to make. Occasionally bringing a favorite toy from home helps a child to adjust to school at the beginning of the year. In such instances he may be allowed to use it exclusively.

At other times the child is encouraged to share to some extent the toy he brings. At the same time the teacher explains to the others that this toy is not a preschool toy but one that belongs to the child who brought it, that it is his own, and that he has prior claim to it. There have been instances when a child who is having difficulties in learning to share has brought toys from home in order to play with what he wishes whenever he wants it. In such cases the teacher may ask the parents' cooperation in discouraging the child from bringing his own things to school.

Sometimes an unusually valuable book or doll is brought. The teacher may suggest that it be kept in a safe place except for a time when he shows it to the other children under her supervision. It is explained to both the child and his parents that, although the teachers will do their best to safeguard anything which is brought to school, it may become damaged; unless that risk is taken, the child's own toys should be left at home.

The child is also taught to respect the rights of others in situations other than the sharing of toys and materials. Each child has a right to space. If he has chosen to sit in a certain place to take off his wraps, that is his place for the moment and others may not crowd him out of it. Each child has a right to a share of preeminence—to be chosen as "leader," or to be the favorite character in a dramatization. Each child has a right to determine his own activities, provided that they do not interfere with those of others. Each has a right to personal integrity, to a share of opportunity for attention, and to self-expression.

Conflicts among the children are inevitable, of course, and are not considered wholly undesirable. The aim is to have children play cooperatively with one another, but this involves making adjustments, giving in to others at times, and learning to stand up for one's rights in a legitimate manner. To be able to settle a disagreement satisfactorily is a very necessary part of getting along with others. The children are encouraged to settle their difficulties without appealing to the teacher.

Getting what one wants by physical force is almost always discouraged, the exception coming in the case of children needing encouragement in asserting themselves. Children are helped to solve difficulties by verbal rather than physical means. Acceptable methods of approach are explained and illustrated to children who attack others. However, an attempt is made so to supervise activities that a child does not become involved in too many conflicts in proportion to his ability to meet them. The teacher may say, "Tell Mary that you want to use the wagon now. Explain to her that it is your

turn," or "Tell John that that is your shovel and ask him to wait until you are through." In an extreme instance a child's control may be so inadequate that the teacher may have to remove him from the situation. In such cases it is probable that her subsequent educational policy for him will, on the whole, involve less difficult social situations but will also help him gradually to take on more difficult ones.

Sometimes a younger child seems not to understand that it hurts to be pushed over, shoved, or slapped. If the teacher believes that such is the case she is careful to explain; for example, she may say, "It hurts Ann. She is crying because you slapped her." If the teacher feels that this has been an initial attempt at a social contact she may help the two children to become engaged in some play together. On later occasions her suggestion, verbal or otherwise, may anticipate the difficulty.

The teacher does not always deal solely with the offender. Children are encouraged to stand up for their own rights, and it is considered legitimate to hold onto a toy that another child unjustly tries to snatch, or to ward off an offender by pushing him away. She may say, "Hold on to the truck if it is yours. Tell him he can't have it," or "Put your hands up so he can't touch you. Tell him to stop."

The teacher, however, is not constantly interfering in every quarrel that arises. To arbitrate every disagreement would be to deprive the children of independence and of opportunities to learn how to stand up for their own rights and how to protect themselves. For the most part, quarrels among preschool children are exceedingly brief. To seem to ignore them is often the wisest policy, for they are often over and settled almost immediately. The teacher's stepping in may only magnify their importance. She is alert to see that no child is really injured physically by other children and that the situations are not such that subsequent behavior may be unfortunately conditioned.

It does not seem essential or wise for the teacher always and invariably to try to be sure that justice is done, although

the clay to more advantage than by simply patting it. Sometimes she shows a child how he may roll a ball or do something else which he wants to do and with which he is having difficulty. She makes no suggestions which would make the children feel that their activity must represent objects. If children name their objects, even though the object looks nothing like the name, usually no suggestion, criticism, or comment is offered.

The children in First Group show much interest in clay and continue this activity for long periods of time; some children have stayed at clay for as long as an hour, though other activities were going on throughout this time.

In Second Group the children derive considerable pleasure from handling the material. They roll it on the table, punch holes in it, flatten it out. This goes on until they get the feel of it. One child discovers that his work looks like Black Sambo's pancakes, one is rolling his into balls. As he arranges them in graduated sizes he comments, "Here is the teeniest one, this is the tiny one, this is a little one, and here is a great big ball." At one table two children begin to tire of their clay and they spread it over the table. By chance they discover they can make designs on the table. Occasionally a teacher sits with the children and models something, perhaps a dog or a house surrounded by a fence.

In this group, at first, paste is used much like paints and when all the paper is covered the children seem satisfied with the result. Gradually they come to realize that two pieces of paper will stick together and then they become interested in combining different colors of paper together. One day Paul announces, "This is a road and here is the car going down the road" as he tears a strip of paper and pastes it on a large sheet of paper. Then he rolls another smaller piece to make the car. Judith, sitting at the same table, is busy pasting one piece of paper on top of another which she states is a mountain. Some of the children need help with technique. At some time in the child's experience with paste, the teacher may show him how to wipe off the brush on the edge of the jar, apply

what seems to him unreasonable aggression, pushes her; she loses her balance and falls down. Although physical attack is discouraged, teachers agree that if other means are ineffective it is legitimate to defend oneself against such attack by warding off the offender. Perhaps Arnold was at fault for pushing hard, but he is somewhat justified if he thought Sarah attacked him first. How can the teacher decide without knowing what the child's intentions, thoughts, and emotions are? All she can do is to make a decision as best she can and be sure that she explains the basis of her decision clearly to the children. Probably she will err occasionally. The teacher can only console herself with the argument (or rationalization, if such instances occur too frequently) that individuals have to learn the necessity of accepting unpleasant experiences and injustices at times.

Sometimes the rights of the group are in contrast to the rights of an individual. If a group of several children is using all the hollow blocks for a train, what is the solution for the individual child who wishes one of those blocks? He may be told that the others are using them and that he will have to wait until they are through. It is conceivable that for the time being he may have to give up his wish. The teacher helps him to find another activity, but the child may by no means be satisfied with a substitute. If he annoys the group and interferes with their play by frequent requests, the teacher may remind him that he cannot have the blocks and may by redirecting his activity protect the group from further interference.

When a child wishes to enter a group and is met with refusals, the teacher may try to help him enter it by suggesting a part he might play or a more acceptable mode of trying to enter the group. Nevertheless, if the members of the group are insistent in the refusal, the teacher respects their rights and gives preference to the desires of the majority. She then attempts to find some other activity for the child who has been repelled, but she does not attempt to explain the group's refusal on false grounds. It is not justifiable to tell the child

that "they didn't understand what you wanted," when very obviously the children simply did not wish to have another member in the group. If, for example, they saw no need for a second ditchdigger, then the teacher has no right to insist that there be one.

Individual and Group Responsibility

Objectives for the child as a member of a group are for him to see that "rules" of group behavior all apply to each member of the group and to realize that as a member of the group he is expected to conform and that conformance by each member is desirable in order that the affairs of the entire group may proceed smoothly and happily.

As the year progresses the teachers expect each child to assume more responsibility for himself. Some children may reach a given level of independence much sooner than others, and some may never be very independent. The teacher by no means expects each child invariably to be entirely responsible but she does expect him gradually to learn the principles on which decisions are based. Instead of having to give complete explanations of why certain behavior is undesirable and other behavior more desirable, she frequently uses reminders and questions. She may, for example, ask, "What did we decide to do about that?" "Have you forgotten how we take turns?" "What do you do when you want something that another child is using?"

Often one child reminds another about the group rules and this is not discouraged unless a child becomes overly solicitous. In such cases the teacher may say, for example, "He knows what to do; you don't need to tell him." "Let him find out for himself." "You go ahead and finish what you have to do; if he is not through he will just have to miss the story."

Sometimes a child who seems to be easily disturbed by the nonconformity of others frequently comes to the teacher about something concerning another child. No hard and fast rule will apply to the way in which the teacher handles such behavior. The term "tattling" is an unfortunate one, but one

which the child is bound to experience sooner or later, and it is imperative that he be carefully guided in situations of this kind. If one defines "tattling" as deliberate telling of another child's misbehavior with the purpose of getting that child into difficulty, it is rare indeed at the preschool levels.

The teacher may feel that the child who frequently comes to her with reports of another child is in danger of becoming a tattler or of being considered one, which is the crux of the matter. Still, she cannot indiscriminately discourage such reports. Sometimes a child's observations have prevented an unfortunate accident or have provided an opportunity for the child concerned and others to learn what must not be done or what is dangerous to do. Furthermore, awareness of undesirable behavior is of itself to be encouraged. Yet the child who reminds others of their shortcomings is apt to be unpopular.

It does not seem feasible to teach a child to watch infractions and never speak of them either to an authority or to the persons involved. In adult society it is often considered a social obligation to report infringements. It might be said that the child should judge the seriousness of the infraction and decide whether to remind the child or the teacher or both, but such would be a weighty decision for a young child. Adults are faced with similar problems frequently. In discussions of this problem, it has been suggested that much laxity among adults in their obedience of laws and customs and much of the difficulty of law enforcement in our present social order is the result of this very problem. Should it be a moral responsibility to interfere in such instances? When should one protect a wrongdoer? What, then, is to determine the teacher's procedure in such instances at the preschool level?

There are children who seem to be too easily upset by lack of conformity on the part of others. The teacher must try to help them realize that some things are not important enough to bother about, that sometimes it is the children who should be told, and that sometimes it is imperative to tell the teacher immediately. Furthermore, she may help the child learn how

to interfere, when it is necessary or justifiable, in a manner which will not antagonize the other children. The teacher decides whether the child is too easily upset by such occurrences, whether he is not discriminating sufficiently in the situations which he reports or in which he interferes, whether he reports too frequently, and what his purpose and understanding seem to be. Furthermore, she tries to handle each situation so that the child understands her and sees the whole situation and his relation to it clearly.

The child who champions another, giving him help, solving his problems, or settling various social difficulties may sometimes present a problem. Such help may be regarded as an indication of a friendly attitude and as such will be considered desirable and encouraged. At times, however, it may be discouraged. For example, the other child may seem to resent such interference and regard it as an intrusion. The teacher may try to help him understand that his friend is trying to help him. If the former does not want help and resents what seems to him unwanted interference, it is the other who needs an explanation. The teacher may say, "I know you wanted to help but Jane prefers to do it by herself." Sometimes the teacher may feel that the second child needs to act of his own accord and without assistance. Then she will try to prevent the interference, explaining to the first child, "I think it would be better to let Julia work by herself"; or "Julia will find a way to do it all by herself if we leave her alone."

Occasionally such "helpfulness" may be considered undesirable if the child is interfering frequently. Perhaps he needs more absorbing interests of his own; his frequent interference may reflect the lack of sufficient activity on his part. Sometimes a child is overprotective toward another, assuming a motherly attitude, especially toward less able children. Such a child is kept from preventing independent activity in others and is helped to see that such interference is undesirable. Above all, he is helped to find his own activities, so that he becomes less concerned with the difficulties of other children. Prescribed rules which will cover all instances cannot be

stated. Championing another child's problems may be desirable or undesirable depending upon the personalities and needs of the children involved and upon the circumstances of the situation. However, the manner in which any such help is given should be friendly and pleasant. A helpful, cooperative attitude and constructive criticism are desired rather than a derogatory, impatient, or "know-it-all" attitude.

Additional Attitudes toward Other Persons

Friendliness, Affection, and Sympathy

In encouraging desirable social attitudes, the teacher aims to be an example herself. She is friendly and interested in what the children do and say; she expresses sympathy if some child is hurt or suffers a disappointment; she apologizes if she has misunderstood a child or finds herself in the wrong. She observes the common courtesies with children as with adults.

While the teacher endeavors to be as pleasant as possible, she does not go about constantly smiling. To attempt to appear always pleased about something would be hypocritical and unnatural. There are times when she indicates that behavior is undesirable or desirable and at such times it must be clear that the teacher's attention is upon the behavior and is objectively impersonal. After a difficult situation is settled, she is careful to treat the child in other situations as though nothing unpleasant had happened.

The teacher may commend instances of friendly behavior and of generosity and sympathy. For instance, she may say, "Thank you for helping John to move the ladder. It is much easier for him when he has some one to help him," "It was kind to brush the sand out of Margaret's hair," "That was a friendly thing to do," "Martha was kind in offering to show Robert where the scissors are," or "That was a good way in which Tommy explained that he didn't mean to bump Ann and told her that he was sorry."

In encouraging friendliness, the teacher may say, "Perhaps you could help Barbara to pick up those crayons. There

were so many in the box that it is a hard job to do it all alone," or "Peter would like to use the clay but there is no more. Could some of you give him a little of your clay?" or "Jane feels bad because she hurt herself when she fell. She might feel happier if you would ask her to ride in your wagon for a while." If a child accidentally bumps another child or does some damage, the teacher may help him to explain that it was just an accident. If at all possible he repairs any damage which he has done.

If a child acts in an unfriendly manner, destroying another's property, obstructing his activity, pushing or hitting, or making unpleasant remarks, the teacher explains why such behavior is undesirable, and some reparation is suggested if that is feasible. She tries to discover the underlying causes of this tendency in the child. She realizes that there may be some relationship between this behavior and lack of occupation and tries to redirect his activity. However, if an older child persists in this unfortunate behavior the teacher may explain that it is most unwelcome and she may find his temporary removal from that situation effective.

When a child seems to be teasing another in enjoyment of the response he arouses, she directs her attention not only to the offender but to the child who is being teased. The latter may need to be encouraged to stand up for his own rights and to show resistance. Sometimes it may be necessary to say to him, for example, "Bobby is just doing that to hear you shout and object. If you did not pay any attention to him, he would not have anything to laugh about." The teaser is told that his behavior is undesirable and at the same time the teacher suggests other activities. She may suggest something for the two children to do together. She makes it a point to see that the child who is inclined to tease is kept busy at activities that bring him legitimate satisfaction.

If a child appears resentful of the attention some other child is receiving, the teacher first makes sure that the one who seems annoyed really does get his share of attention. Some children actually demand more of the teacher's time than

others, and she must be sure that those who are more independent are not being neglected. Whatever the reason, at the time the situation arises she explains why the other child is receiving more attention. The teacher of older children may say, for example, "You see Robert has not yet learned how to take his wraps off all alone, so I am helping him learn. Soon he will be able to do it by himself the way you do, and then he won't need me to help him." On the other hand, explanation to a two-year-old might be, "Robert needs a little help. You can do it by yourself." Sometimes a child may make derogatory remarks about the other child or refuse to attempt on his own part that which he is already capable of doing. Perhaps he has been experiencing too much failure and not gaining satisfactions. The teacher may make an effort to point out the best features of his activities. She may say, for example, "But even if your table isn't as steady as Margaret's, it does stand up all right, and you have painted it an attractive, bright color," or "Your table is painted carefully," or "It's all right if you don't know how to skip. You are keeping time to the music." If he needs more confidence in his own abilities the teacher may say, "You will be able to do it soon." The teacher of Third Group and Junior Primary might add, "We all have to learn how and to practice before we can do it. You are doing better now than you did last week," or "All you need is a little more practice." She may so arrange that he feels success in another activity to counteract the lack of satisfaction in one in which he meets considerable difficulty. The teacher tries to have each child enjoy and appreciate the accomplishments of others and to learn from their example without comparing himself too unfavorably or setting himself too high a standard. The improvement of one's own performance is more desirable than attempting uncritically to emulate that of others. Often a child needs help in learning that people differ in ability. To a four-year-old who was complaining because she could not sing so well as another who was unusually gifted, the teacher said, "Even if you don't sing as well as David, you can have a good time singing. I can't play the

piano as well as Miss Learned can but I enjoy playing. I enjoy listening to her when she plays, too."

Occasionally a child resents his friend's playing with other children and therefore needs help and guidance in learning to adjust to the group. The teacher tries to help him make other friends and helps to interest both children in playing in larger groups.

When a child is inclined to sulk after he has had some difficulty, one satisfactory procedure is for the teacher to disregard his behavior. If she pays no attention to the fact that he is sulking, the child can derive little satisfaction from the performance. The teacher does not wish to let him sit and brood, but may suggest a new activity or proceed with the routine or whatever activity is at hand as though nothing had happened. However, she is careful not to do anything which the child might interpret as an attempt to pacify him or coax him into a good humor. At the same time she does not recognize his sulkiness by pointedly ignoring him. If, for example, a child chooses to sulk and refuses to join in some activity, he is let alone. The fact that the child is sulking is not mentioned and no issue is made of the matter. The teacher tries to discover the cause of the sulking if it occurs often.

Demonstrations of affection between teacher and child are infrequent, although the teacher shows her fondness of the children by her generally friendly manner and her interest. She may give an occasional friendly pat or put her arm about a child for a moment, but such physical demonstrations are relatively rare.

If a child is hurt or is made unhappy by some disappointment, the teacher may give him an encouraging and sympathetic hug or touch, or hold his hand as she tries to help him find something to do. With the younger children, or occasionally with some older children who seem to feel insecure and unhappy in adjusting to their new environment, these contacts may be temporarily more frequent. Sometimes the teacher may hold a younger child on her lap or pick him up for

a while. The proximity of the teacher seems to give the child the feeling of security that he needs when everything is new and strange. At the same time she interests him in materials and equipment so that he will soon find his attention absorbed by the variety of things to do.

If a child seems unusually demonstrative, frequently hugging the teacher or trying to kiss her, she responds matter-of-factly, yet not coldly, and soon indirectly suggests another activity. She observes such a child closely to discover underlying causes. She makes sure that he is receiving his share of attention. He may need help in learning to play happily with the other children; he may lack initiative in finding his own amusement; he may need more challenging activities. It is possible that he may not receive enough affection at home.

Demonstrations of affection are, on the whole, brief and casual. It is the teacher's aim to have each child so satisfactorily adjusted that he does not feel an actual need for that kind of attention in school. On the other hand the teacher's attitude is warm and human and not cold or impersonal.

The children are encouraged to show affection for one another not by physical demonstration but by a generally friendly attitude and manner of acting. If one child hugs another, it is regarded as natural and is apparently ignored unless he does this frequently or unless the other child objects. Sometimes a child resents the physical interference or may misinterpret it as an attempt to push or crowd him or hamper his activity. The teacher may have to explain to this child that the other does not intend to hurt him but is merely trying to show how much he likes him. To the other one of the pair she may explain that his friend does not like to be hugged because it is interfering with what he wants to do, or because it really hurts him. She may, if possible, suggest some activity for the two children to play together where they will both be actively engaged, or she may for the demonstrative child suggest another activity which will remove him for the moment.

Attitudes toward Adults

An important consideration in guiding the child's behavior is the establishment of desirable relations between the child and adults. This involves justified confidence in the teacher, understanding of her interest, and acceptance of contacts with her. The relation should also be characterized by independence and self-reliance on the child's part, and by freedom from self-consciousness and from restraint. The child should be natural and at ease with adults. The teacher's friendly manner, her sympathy and courtesy, her willingness to listen and answer questions and to help and protect him in times of difficulty all demonstrate to the child the teacher's interest in him as well as encourage his confidence in her.

It is also necessary, if the teacher's guidance is to be effective, that the child comprehend and have confidence in her role in making requests or offering suggestions. She does not seek to impose her authority upon the child merely by virtue of her position. Her approaches and contacts with him are governed by well-formulated principles and procedures. In making requests or suggestions and in giving directions, the teacher makes sure that the child understands what she wishes. This means not only using language suited to the child's level of comprehension but, what is especially important, being sure that the child understands the reason and the necessity for his cooperation. An explanation is by no means necessary at every contact the teacher has with a child, but she needs to be especially alert lest the child become confused at the beginning of the year or whenever a new situation arises. If he fully understands the reasonableness of a request, a rule, or a procedure, his cooperation is willingly given under most circumstances. Naturally there will occur some instances, well represented by those in which the child is in physical danger, when a teacher must act immediately. Later she will explain.

Sometimes the child does not foresee that the natural consequences of his behavior may be unpleasant; then it is the

teacher's aim to help him so that he may avoid such behavior in the future. He may, for example, start to sit in a damp spot on the playground, not realizing that his clothes will soon become wet and uncomfortable. He may start to run with a rake in his hand because he is not aware of the potential danger. The teacher's interference in such instances is more than merely prohibitive; by giving explanations her aim is to teach the child to consider consequences and to see the relationship between a certain kind of behavior and its undesirable outcome.

A child may well know the consequences of his behavior or the reason why it is undesirable, yet simply not care or not be impressed by the reason. For example, a child in anger may hit another child, deliberately intending to hurt him. He must learn that any behavior which harms others is undesirable. If he knows the consequences to the other child and does not care, he must learn that such acts are completely unacceptable.

By the manner in which she asks for cooperation or states a request, the teacher makes clear to the child whether she expects compliance or whether he may make some choice; in other words, she indicates whether she is suggesting or requesting. When she gives the child a choice, she accepts his decision and does not then attempt to influence him to change his mind. For example, if she says, "Would you like to build with the blocks or would you like to come in for music now?" and the child chooses to build with blocks, she does not then try to persuade him that music would be preferable.

When it makes little difference which alternative the child selects, the choices may be stated simply, as in the previous example. Sometimes the teacher may offer the child a choice but at the same time guide him toward making what seems to her the more desirable one. For example, she may say, "It will soon be time to have all your blocks put away. We are going to have a story in just a few moments and I hope you will be ready in time to hear it." If she should say, "Would you rather spend all your time putting your blocks away or

do you want to hear the story?" the question itself might make the alternatives equally attractive. However, in either instance the choice remains with the child.

When the teacher expects compliance to a request or acceptance of a suggestion she makes this clear to the child. If she wants the child to come indoors, she says simply, "It is time to go indoors now" or "Now we are going indoors." She is careful to state her wish so that it will not imply that there is any choice to be made. If, instead, she should say, "Are you ready to go indoors now?" or "Do you want to go indoors now?" and the child answers, "No," then she cannot insist that the child come immediately.

It is the aim to have the children assume as much responsibility for their own behavior as they are capable of doing. Sometimes it is necessary for the teacher to make decisions and to insist on certain behavior. However, she uses commands or requests which demand acceptance as little as possible. She endeavors to guide the children so that they govern their own behavior by learning to make reasonable and wise choices and decisions. To this end, reasons and explanations frequently accompany or follow a request unless it is apparent that the reason is obvious to the child. Thus the child does not feel that he must always give in to authority arbitrarily imposed. At the same time it is important that there be some instances in which he has no choice. The child must learn that compliance with recognized authority and respect for superior wisdom are a part of group living.

When the teacher is faced with an outright refusal, she must first make certain that the child has understood her wishes and that he understands the reasons and explanations given. If he knows what will result from his behavior and still does not wish to comply, the consequences follow. The teacher does not coax or cajole the child, or ignore or give in to him. As much as possible the consequences are the reasonable result of the circumstances. They are directly connected and related. Moreover, they do not come in any sense of retribution or atonement but as a simple "cause and effect." If a

child dawdles through lunch, he may miss the story which follows because he was not through in time. If he refuses to put his toys away at the allotted time, he must finish before he can join the others in the next activity. If he misuses equipment, he may not be allowed to use it again until he will agree to use it properly. If he will not share the tricycle, he may not use it at all until he is willing to take turns.

Occasionally a child will deliberately violate a rule or refuse to comply with a request in order to gain attention or in order to tease the teacher. If the behavior does not interfere with the welfare of the group, the teacher may seemingly ignore the child. If it is necessary to interfere, she is careful to avoid giving the impression that she has been teased. She is, however, alert to discover underlying causes for such behavior; she directs her attention to the core of the problem and gives the symptoms as little attention as possible.

When a teacher is new to a group, some children will deliberately try to be annoying; they will "try her out" to see what will happen. Here, too, she pays as little attention to the teasing as possible. If she is poised in dealing with matters when it is necessary to step in, the children will soon respect her opinion as one who makes and stands by her decisions.

The teacher tries always to be as reasonable in her requests as possible. She is considerate of the child's activity, she avoids interrupting him when he is busy, and frequently she gives him warning in advance. If she does have to break into an activity abruptly, she says that she is sorry to have had to interrupt and explains why it was necessary. She tries to keep requests and directions at a minimum, arranging the program and guiding behavior so that the children are as independent as possible. If the teacher does not have to remind the children what to do next, to find something for them to do, or to settle social difficulties, then she will have more time free for offering stimulating suggestions and for providing a more constructive program.

The teacher is careful to be consistent. If she explains and reasons accurately, consistency will follow. Procedures are

pursued as consistently as possible. However, this does not preclude the teacher's trying out different procedures in an effort to discover which is the most effective. An approach to which one child responds very well may only aggravate another. For instance, to put a hand on one child's shoulder seems to have a quieting effect so that he is ready to listen to what the teacher wishes to say; another child will jerk away from any physical contact and become more resistant and less amenable to suggestions. Consistency in treatment of problems does not imply that procedures are not progressively adjusted to the child's needs and understandings. The teacher does not view behavior as single and isolated. She looks for causes. She considers behavior in relation to attending circumstances and the general characteristics of the child. As he grows older he is expected to take more responsibility for his own behavior. He is helped to learn what behavior is acceptable. Gradually, reminders will suffice instead of explanations, and infringements may be treated differently. Thus, a child in Junior Primary who throws sand even though he knows better may immediately lose the privilege of playing in the sandbox for a time. In the case of a two-year-old at the beginning of the year, there may be only an explanation made or a warning given. The same behavior may in one child be due to lack of understanding and in another child to thoughtlessness; in a third it may constitute a deliberate attempt to gain attention or to harm another. The teacher may even on occasion seemingly ignore behavior in a child on one day when she would not do so on another. If he has had some very unpleasant experience just previously, the teacher may overlook his behavior at the moment. If he has been absent from the group for some days, she may expect less of him when he first returns. If a child is having considerable difficulty in adjusting to the group, the teacher at first deals only with his more serious problems and ignores minor difficulties as much as possible until the child is better adjusted. To admonish him frequently would involve repeated conflicts; under such circumstance the child might think of the teacher only

as a source of irritation, as a heckler rather than as a helper.

The standard expected of a child is by no means rigid and inflexible, but is thought of in the light of the child's usual behavior and the situations and values in question. If a child seems rather tired, the teacher may, for example, overlook the fact that he does not put away his blocks when the time comes for doing so. If a child has had an unusually long nap and is anxious to have lunch with the others, the teacher may offer to lace one shoe while he does the other, or not call him back to insist that he put away his slippers. If he brings a a pet to school and in the excitement and hurry of showing it to the others forgets to hang up his wraps, the teacher does not spoil his fun by sending him back to the cloakroom.

It seems obvious that the teacher should keep any promises she makes, but often it is difficult for her to remember. It is easy sometimes to forget that one has told Margery that she may be the first to choose a story on Monday, or that Ann may have a turn to be Humpty Dumpty at the next music period. But to forget may destroy a child's confidence in the teacher or make the child think he has been intentionally slighted. It is helpful for a teacher to write down promises that she makes, especially if any considerable amount of time is to elapse before the opportunity will arise for fulfilling them. Even if the child forgets, however, it is only right that the teacher fulfill her promise, and if she is discovered to have forgotten, she admits the fact and offers her excuse if she has one. Probably a teacher refrains from making promises which are hard to remember.

Throughout these discussions reference has been made from time to time to removal from a situation as a means of control. As a general principle it is preferable to help the child to face the situation and adjust adequately. This may be done by helping him redirect his activity or through forestalling some of the difficulties by effecting quieter or different activity; however, under some conditions, occurring rather rarely, such control is not feasible. Occasionally a child seems

to be overexcited and to be losing self-control; he may not be able to act in a desirable manner in spite of the teacher's efforts to help him. She may then remove him temporarily in order to talk to him and help him become calm. In some instances it may be helpful for him to play alone or play quietly until he has gained sufficient control to reenter the group. With older children who can understand the concept of behavior as desirable or undesirable, additional explanation may be made regarding the reasons for removal. The teacher is impersonal, explaining that the undesirability lies in the behavior; she tries not to give the idea that the child himself is unwanted in the group. He is not removed for an indefinite time or told to stay until the teacher says he may return, but it is his responsibility to reenter the group whenever he feels that his behavior will be of the kind to be acceptable. He is made to feel that he will be welcomed in the group.

Self-reliance

While the teacher's chief function is to guide the children, this very guidance is directed toward making them independent of her. The objective is to develop self-reliance in routines, in finding one's own activities, in managing social affairs, and in solving problems, and independence of more than average attention and approval.

In the younger groups, the child is given every opportunity to do as much as he can to take care of his needs in routine situations. He is encouraged to take pride in his independence and, at the same time, to accept these routines as matter-of-course. As the children grow older, more independence and more self-reliance are expected and taken for granted.

The material provided and the whole organization of the program are designed to enable the child to find his own activities and to be engaged in projects which, by their very nature, will be interesting and stimulating. The teacher is ready to suggest an activity, to provide new incentives, and to further the development of initiative, but she avoids telling

the child what to do and how to do it. Much of her direction is subtle and indirect. If a child is wandering around with nothing to do, she may unobtrusively put some different equipment in a conspicuous place; she may suggest that he himself decide what he would like to do; she may suggest one or two alternatives; and sometimes she may draw his attention to an activity in which he might engage. She may suggest an alternative for an activity which she considers undesirable; she may initiate an activity and then withdraw as soon as the children are sufficiently interested to continue without the need of her presence; she may step in with a suggestion that will stimulate an activity that is not progressing profitably. She guides activity but she does not direct it. Her aim is to help the child develop initiative so that he will not be dependent upon her for suggestions.

With regard to social behavior, the teacher's objective is to develop in each child a sufficient understanding of social rights and privileges that he will be able to manage his own affairs with a minimum of teacher interference. She is ready and willing to suggest ways in which the child may settle his difficulties, to make explanations that will further his understanding, to protect each child from injury and serious injustice. But she does not expound laws to be obeyed or pronounce judgments. She wishes the children to look upon her as an adviser, not as a dictator.

By encouraging self-reliance and habits of constructive thinking the teacher helps the child to be able to solve his own problems. Instead of solving a difficulty for him, the teacher encourages him to investigate, to seek for causes, and to try different methods of working out the problem. She may give him hints or suggestions, but she provides the child with just enough help that he can go ahead and work out the problem by himself. For example, if a child comes to the teacher saying, "I can't get the wagon out of the sand pit. Will you lift it out for me?" instead of moving the wagon or telling the child to unload some of the blocks, she may say, "I think you can get it out by yourself if you think of a way.

Do you know what the trouble is?" If the child answers, "It is stuck," the teacher may say, "How can you fix that? Can you think of a way to move it?" If the child replies, "The wheels aren't stuck. I just can't lift it up. It's too heavy for me. You do it," the teacher may say, "Well, what could you do to make it lighter so that you can lift it out all by yourself?" If perhaps the child does not think of unloading the wagon, the teacher may help out with a hint by saying, "That is quite a heavy load of blocks. I think you know how to make the load lighter." Even though in the end the teacher has practically told the child what to do, still he moves the wagon by himself and he has been urged to attack a problem by looking for causes and to try to think of solutions to the difficulties. Under such encouragement he will gradually become more independent.

It is also desirable that the child be independent of too much approval, praise, and attention from the teacher, that he be at ease and natural in his contacts with her, not self-conscious, withdrawn, or showing off. Praise and encouragement are used discriminatingly, and the teacher is careful to avoid having a child become dependent on praise. An activity should be performed or accomplished for the satisfaction derived therefrom, not to gain the reward of the teacher's approval. At the same time, the value of justified praise as an incentive is well recognized, and the teacher is careful to direct commendation to what the child has done rather than to him as an individual. When a child is learning a routine or a new activity, his effort is encouraged and praised, but as he becomes more proficient and independent, praise is less frequent and the child is expected to accept this performance as a matter of course. Praise is given for accomplishment of a difficult task and for the improving of some performance which was previously less desirable. The teacher's praise, however, is never lavish and never insincere. If the child has obviously not done his best, to praise highly may make him satisfied with an inferior level of performance. The teacher tries to give the child satisfaction and yet hold him up to his best standards.

The child's activity receives special notice only when his accomplishment is good in relation to his previous achievements. In giving praise, the teacher endeavors when possible to be specific, to point out why the performance is good, rather than saying merely, "That's fine" or "That's good."

If a child makes repeated bids for approval, the teacher tries to find the causes underlying this behavior and act accordingly. If it is because he has received praise too easily, or has a feeling of insecurity, for example, she tries to approach the problem from these angles, giving him new satisfaction where she can do so legitimately and cutting down praise elsewhere.

Attitude in Difficult Situations

A further objective is that of helping the child to face squarely and effectively difficult situations or failure. There are involved the ability to criticize himself, the ability to recognize his own part in difficult situations, and the idea that failure should be an encouragement to further effort. If he is finally unsuccessful, he should face this fact effectively. He should accept success objectively.

When he is faced with a problem the child should have the attitude that further efforts on his part, if rightly directed, should help in solving it. He should proceed without extreme emotional behavior, trying several methods if the first is not successful. Falling back upon unwarranted excuses for himself, upon censure of materials or of other persons, upon procrastination, or upon projection and rationalization is undesirable. If such behavior occurs the teacher tries to help the child to become calm and encourages him in making some effort. A child who frequently reacts in an undesirable manner under difficulties needs help in learning that satisfaction will come from accomplishment and that accomplishment will follow only upon effort. The teacher of the older child may point out the ineffectiveness and inapplicability of emotional responses and rationalizations, and at all ages the emphasis lies in encouraging the child's own effort

and in giving him praise and satisfaction for legitimate accomplishment.

While the above constructive approach represents the most fundamental attack in the case of children consistently reacting undesirably in such situations, the general philosophy of the method is widely applicable. In isolated instances the teacher guides the behavior in relation to the specific situation. If, for example, a child is making a birdhouse out of wood and cuts off the board he is sawing so that it is too short, throws the board on the floor, and shouts, "This wood is no good. I don't want to make a birdhouse anyway," the teacher may say, "You can do it all right. Let's try again. Do you know what the trouble was? You forgot to measure the board first. That is why it was too short. Find another board and this time measure it so you won't make it too short. I'll be glad to help you." This instance offers for the present discussion an opportunity to suggest that a wholesome amount of "letting off steam" is not frowned upon, figuratively speaking It is only when the response is prolonged and violent or coupled with other undesirable behavior that it needs guidance.

Sometimes a child will resent adverse criticism made by another child. If this is the case the teacher may direct his attention toward remedying the situation. She may say, "You can fix the blocks so that the roof will stay up. What kind of blocks do you need to make a good roof?" or "When the roof is steady it will be a fine garage, big enough for all your cars and trucks." She encourages the child by indicating some of the good points of his product and at the same time she encourages him to accept the criticism as a stimulus toward improvement. She is also concerned with the child who tends to make adverse criticisms, helping him to make constructive suggestions rather than mere derogatory statements and encouraging him in applying criticism to his own activities.

Each child should feel so at ease with the teacher and so confident of her fairness and impartiality that he will not try to avoid blame by deliberate falsification. However, diffi-

culties will arise which may put a strain on any child's ability to face them squarely, and the teacher may occasionally have to deal with such behavior.

An inexperienced teacher sometimes unwittingly places a child in a situation in which he will be tempted to falsify and thus brings upon herself the further problem of dealing with the falsification. If, for example, the teacher feels rather sure that a child has neglected a routine in order to engage in some other more interesting activity, a reminder that the routine is not completed or that it was forgotten is direct and avoids the complications which might arise if she should ask, "Did you put all your toys away?" or "Have you washed your hands?" The teacher remembers, too, that the young child forgets quickly and is easily confused, so that he may appear to be avoiding the issue when he is earnestly reporting what he believes to be true.

Obviously, when the teacher knows the facts of the situation it is not necessary to ask the child to report them. If, for example, the teacher knows positively that a child poured his cod-liver oil into the wastebasket, there is no need to ask him whether he drank his cod-liver oil. She may say, "You should drink your cod-liver oil before you have your tomato juice. I'll get more oil for you." or "The cod-liver oil is to drink before you have your tomato juice. There is another glass of oil on the tray. You can drink that first." If a child has reported something to the teacher which she in turn doubts, it may cause him to question her confidence in him if she surreptitiously asks others if he is telling the truth. However, she may on occasion say, "Sometimes one person gets mixed up in telling about what happened. It is easy to become confused. Let's ask several children to tell what happened. We want to have the story just right." If the teacher suspects that a child's statement has been untrue, she first endeavors to be sure of the facts of the matter before deciding whether she will discuss it with him. If she does so she stresses the performance of the desired behavior more than the falsification. She may say, "I think you made a mistake, John. Your wraps

are still lying on the floor. Please go back and hang them up," or "That is not the way it really happened. Margaret had the hammer first. You should give it back to her."

Sometimes younger children will tell rather elaborate and impossible stories, presenting them as though they were true. Often the child really is confused, finding it difficult to distinguish between actuality and imagination. Sometimes he is only trying to impress the other children or to attract attention. Sometimes he is thinking fancifully. Depending upon the individual child, his age, development, and characteristics, the teacher will determine her response. She may do nothing or she may say, "That was just a story, wasn't it? Some things we tell about really happened and sometimes we tell make-believe stories. Yours was a make-believe story."

Facing difficult situations not only involves seeing one's own part in them and trying to do something to solve the difficulty effectively, but sometimes it involves admitting failure. It is desirable that the child realize that accidents will happen, that some things are beyond his ability, and that circumstances may sometimes prevent him from securing what he wishes. When an obstacle is insurmountable, the teacher encourages effective adjustment, discouraging emotional involvements. Her objective is to have the child accept the difficulty as unavoidable and to turn his attention toward other activities. She may say, for example, "It is too bad, but you have done your best, and it just won't work out. There isn't anything more to do about it. Never mind, you can find something else to do."

On the other hand, the child must be able to accept success objectively. This involves, as discussed previously, being independent of too much approval, praise, and attention. It is desirable to feel satisfaction and pride in a worth-while accomplishment, but it is not desirable to be too pleased with one's own ability. The teacher encourages a child toward progressive improvement, discouraging satisfaction with an inferior level of accomplishment. She attempts to eliminate boasting or the flaunting of one's ability in the face of some

one who is less able. If a child tends to make such remarks as, "My scrapbook is better than yours" or "I can do that better than you can," the teacher makes sure that such a child has a high enough level of aspiration for his own products or behavior and discourages his unfavorable criticisms. She may remark, for example, "We know that your scrapbook is good, but John's book is pasted very neatly and he is learning to cut much more carefully than he did at first. By the way, how are you going to make the cover for your book?"

Sense of Humor

In the preschool laboratories an attempt is made to encourage an effective sense of humor or, in other words, to give a light turn to some situations, to see the funny side of things when they occur, and to enjoy laughing. Situations causing children's laughter are frequently different from those which seem amusing to adults and this the teacher recognizes, entering into the children's humor as much as she can. She can aid the children, however, in becoming alert to the ludicrous or unexpected and amusing elements in happenings. It is helpful in many difficult situations to see the funny side; it often prevents an exaggerated emotional reaction to trifling mishaps and smooths the process of adjusting to the environment. Often the teacher's laugh or smile will spread contagiously; the child who has missed his chair as he was sitting down may see the funny side of the matter and be kept from crying. If a tower of blocks falls just as the child is about to put the last block on, the teacher may laughingly say, to allay his disappointment, "That was a surprise, wasn't it? Down went the tower before you knew what happened." However, she is sure before doing this that her laughter will be more helpful than direct sympathy and that under no circumstances will the child interpret it as ridicule. If a child after working hard by himself gets his own shoes on the wrong feet the teacher may say, "Why look at your feet; they are all mixed up! Your left foot is where your right foot ought to be. What a trick you have played on your feet!" On the other hand she may avoid

calling attention to the mistake. If a child has lost a mitten and is reluctant to hunt for it, the teacher may say, "It's like a game of hide-and-seek and you are 'it.' Where do you suppose that mitten could be? It can't run away and hide because it hasn't any feet, so you will be able to find it soon."

The teacher's own sense of humor is probably the best stimulus to the child in this respect, provided that she uses it appropriately and sympathetically. On the other hand, forced expressions of humor are anything but effective.

Genuineness

Since most children seem naturally genuine, the preschool needs to aim not so much toward developing that trait as toward preventing any abnormal deviations from it. Instances of lack of sincerity are rare. However, occasionally an older child may seem to tend toward artificiality. He may attempt to gain his ends by "playing up" to the teacher and other children or by flattering them or may try to avert issues by attempting to sidetrack attention. Usually, giving the child a control of legitimate means to accomplish the same ends is helpful. Learning how to make worth-while contributions in the group, how more effectively to deal with difficult situations, and how more acceptably to approach other children are suggestive means.

It is frequently stated that the child should be aided in developing a wholesome outlook on life, that he should take joy in living. It is undoubtedly easier to formulate the meaning of these terms from the negative standpoint, as the absence of maladjustment, than from the positive. These attitudes are undoubtedly the natural outgrowth of the child's successful adjustment to the demands of his environment. Such means as those of giving him contacts with persons who are well poised, interested, and happy in life, of encouraging him in genuine interests having developmental possibilities, of guiding him to have good physical health, of giving him sufficient freedom to try to work out things for himself, of

helping him to know how to react acceptably from the standpoint of a social group, may all be contributory. Probably the function of the school is to study the child as adequately as possible and, in the light of his whole development, in conjunction with his parents, and in consideration of the objectives of education, to give him the most appropriate guidance.

X

Fostering Aesthetic Development
Literature—Music—Art[1]

General Principles

The whole purpose of fostering the "artistic" side of a preschool child's development is to develop or encourage in him the ability to enjoy art experiences or, in other words, to have some pleasurable responses to beauty. All activities provided for this purpose should be evaluated in terms of whether they do or do not contribute toward this end. Such a concept of the values of art education at this age level clearly demonstrates the belief that in the earlier years the important purpose is to foster desirable attitudes rather than to stimulate performance or achieve products.

While contemporary theory in art education at all age levels distinguishes between teaching "appreciation" and "performance," there is a question concerning the extent to which such a distinction is a workable one in the preschool years. Some degree of participation may be a necessary forerunner to real enjoyment, and in the preschool years participation and appreciation may go hand in hand, both in the

[1] Since this chapter is concerned with aesthetic development, it does not include, except by implication, discussion of the mental-hygiene value of self-expression or of other values accruing from the use of art materials. There is no intention of implying that literature, music, and pictorial or plastic art exclusively circumscribe the child's artistic environment. However, since they constitute a rather large part of his aesthetic experiences, they are discussed in detail here.

simplest form, each encouraging the other. To illustrate in the field of music, the abilities to react to pitch and quality differences and to rhythmic variations are probably the first essentials in music appreciation. During the preschool years, the child is just developing these abilities. If they can be stimulated (research has indicated that this is possible) and if such stimulation, resulting in progress along the desired lines of development, is consistent with educational philosophy, should not steps toward this stimulation be taken? Philosophy in nursery-school education has not ignored such a possibility but, in actual practice, the fear of inhibiting the child's ideas and his desire to participate or of encouraging an antagonistic attitude has been so great that actually many a child has been left alone to work out his own salvation. In other cases, the belief that development cannot be affected by environment at these early ages has resulted in the conviction that a child will develop as fast as he will and no faster. While the policy of "hands off" is distinctly applicable in many situations as a technique, that is, as a means to an end which the teacher definitely has in mind, as a general policy in art education it may not be the best means of achieving the desired goals. In brief, then, the question boils down to whether an interplay of participation and of enriching, stimulating experiences may not finally prove to contribute the most toward preparing the child to enjoy and make something of art experiences in later years.

There is no intention of implying that all the child's aesthetic abilities develop to the same degree in the preschool years, that comparable techniques in stimulating them are possible, or even that stimulative techniques should be used in all cases. Each ability may be thought of as an entity. Nevertheless it seems quite possible to think of all of them in like terms from the standpoint of objectives in art education, if the aims of that education are stated in terms of the ultimate objectives for the individual. The child is encouraged:

1. To know the art as a source of enjoyment and interest
2. To enjoy worth-while examples

3. To enjoy a variety of kinds of expression within any art field and to have an interest in new experiences as well as in continuing enjoyed and familiar ones; to become familiar with various art mediums and materials

4. To acquire such background in the field as is consistent with his stage of development

5. To understand that he may respond to the art as he would like to do

6. To find the art imaginatively stimulating

It is not implied that every child will follow every art with satisfaction to himself. While up to a certain point an individual may like all the arts, there is a limit to the number in which he can specialize either appreciatively or creatively. However, this need not be a concern at the preschool years. Practically, the situation is that of providing opportunity for enjoyment and of subtly stimulating the child without boring or inhibiting him. Nor can it be expected that any one teacher will herself be sufficiently skilled to stimulate interest in all the arts beyond the first stages. The solution for the school may lie in planning so that a variety of abilities may exist in a teaching staff.

Teaching a Child to Derive Enjoyment from Experiences with Art

In teaching children that an art is a source of enjoyment, certain general provisions are thought to be important.

It seems likely that the teacher's real enjoyment of the experience is significant. There exists no proof of this, but the chances are not only that enjoyment by the teacher furthers her own experiences and knowledge, making her more sensitive and able in her teaching, but that her attitude may itself stimulate the children. That the teacher have a clear understanding of her objectives is essential in order for her to take advantage of the variety of opportunities which occur.

The environment is controlled in such a way that various interesting and appropriate contacts are offered. Different types of artistic expressions within a field are included as a

part of the program. In the field of music such types are various sorts of vocal music and instrumental music from different periods of musical history, as written by composers of widely different characteristics.

The child is given experiences with the different mediums of expression. In music, for instance, this means not only singing but the music of instruments and the many forms of compositions for single instruments and combinations of instruments. In pictorial and graphic art water colors, crayons, clay, pastels, etchings, and photographs are only a few of the possibilities. Although there is no thought of trying to employ all possible experiences in the preschool years, nevertheless it is well to keep in mind the wealth of opportunities which may offer themselves. Nor should it be implied that beauty is not to be found outside the "arts."

Although to be informed about art and to enjoy it are not necessarily related at this age level, it is quite helpful for a teacher to give interesting information along with experiences. To discuss the story of the words in a song may make the singing of it more meaningful to a child. To know what a violin looks like and to recognize it as the source of a certain kind of tone may give him satisfaction. To be told something of the artist who painted a picture furnishes reason, perhaps, for looking longer at the picture. It is all-important, however, in utilizing information toward encouraging enjoyment, so to intersperse explanation and experience that the child's attention is maintained and his interest piqued. Too much information preceding the experience, too little opportunity for questions, too long a period of inactivity, too little adjusting of the information to the child's level of understanding, and the experience will disintegrate into one of tolerance or dislike rather than enthusiasm.

The Child's General Environment as a Factor

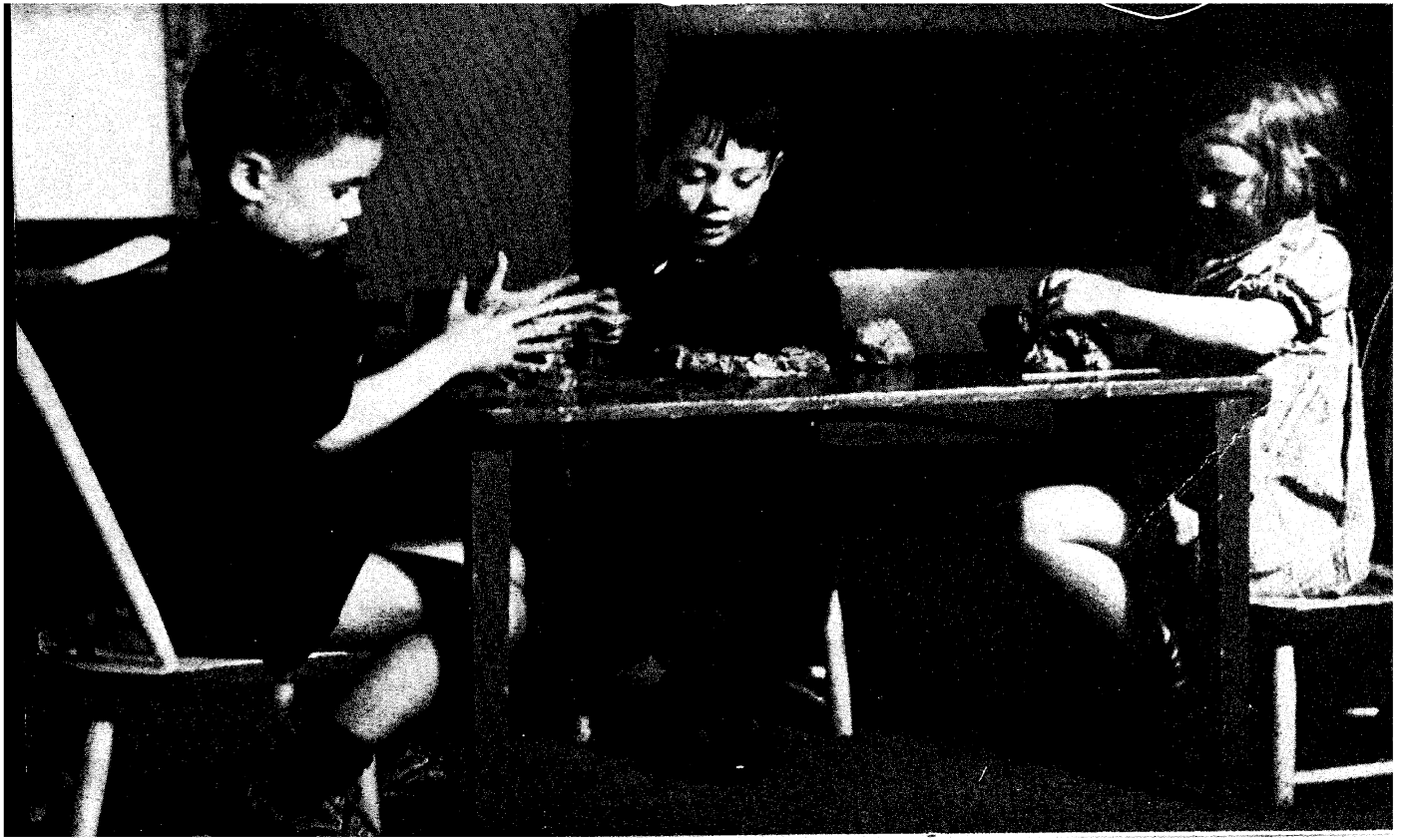
If art is a medium of expression for the individual and the nursery school's function is, in part, that of encouraging him to express himself through art mediums, the child's attempts

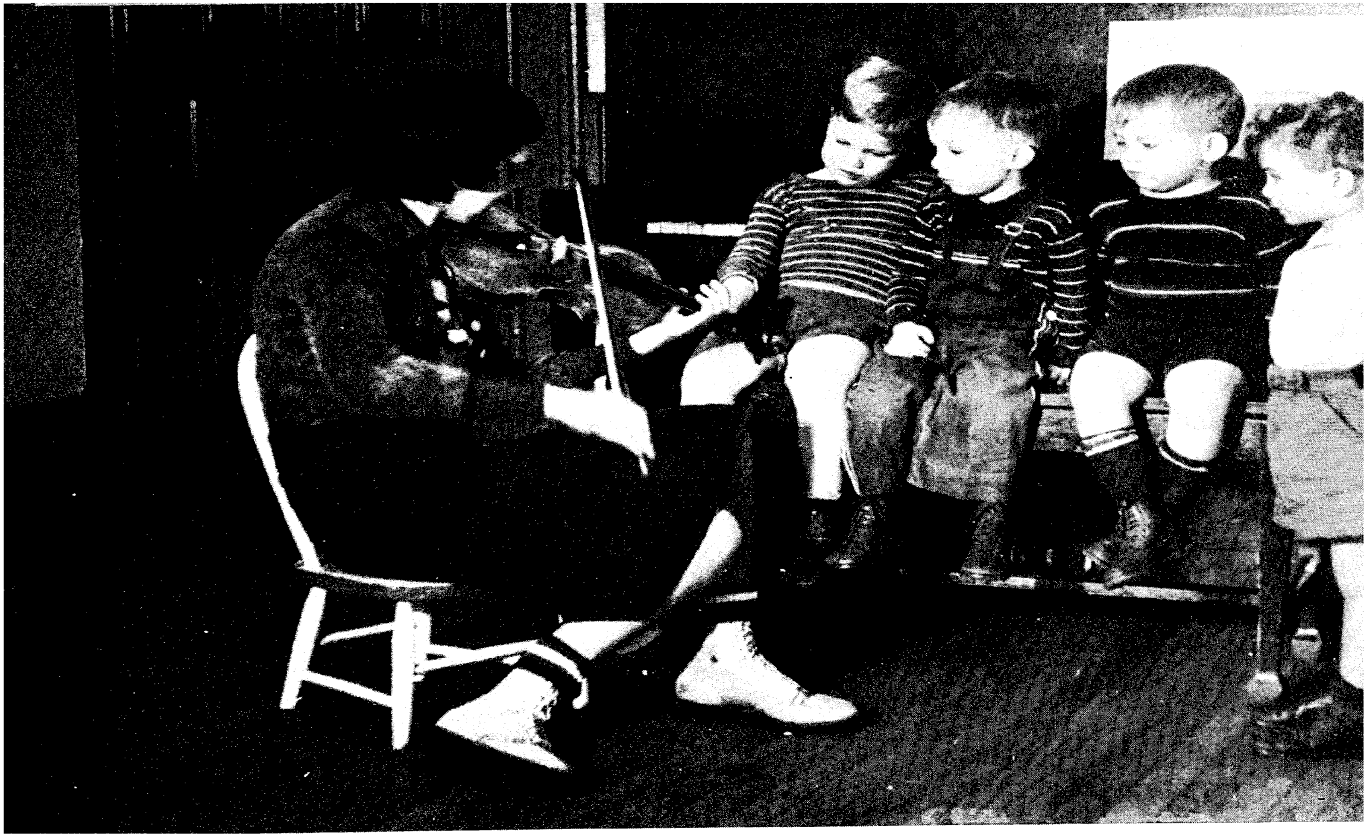
so to express himself should be fostered. One way of accomplishing this end is to give the child "something to say." The chances are that wealth of experience, augmented by the idea that it is pleasurable to portray one's feelings or ideas through painting, modeling, singing, dancing, or words, will stimulate expression on the part of the child. To achieve this end does not mean that special experiences should be introduced for this purpose, but that a stimulating environment from the intellectual standpoint will have a natural outgrowth along this line if appropriately encouraged.

Contacts with Art Materials

Encouraging the child's contacts with art materials so that he will have some opportunity to manipulate them and consequently will have pleasant associations with them is a part of fostering the child's development aesthetically. To a certain extent, this may constitute preparation for the "performing" side of art activity, but it also may pave the way for the development of taste. Working with different colors of paint or of paper, for example, probably causes the child to be more aware of differences in colors and color combinations. Such awareness may be of value in both creation and appreciation. Words are the medium for literary expression, and the child's own attempts to experiment with words and their combinations are of dual value; this is also the case with songs or the child's own melodies or his rhythmic bodily movements. To summarize, then, familiarity with art materials is desirable.

On the creative side, after a child has become familiar with the "tools of the trade," a point of diminishing returns may be reached, after which the opportunity for mere manipulation of materials does not in itself constitute art education. While it is unquestionable that the freedom to experiment is important and that the teacher's encouragement in expression is indispensable, nevertheless the child will eventually reach a point when his skill in manipulating falls short of producing that which he wishes to express. It then becomes the teacher's





delicate function to discover what he wishes and to aid him to express his idea without superimposing her idea on his. To state this in other words, the aim so far as creation is concerned is that of giving the child opportunity to develop skills so that he may be free to progress rather than be balked by his own abilities. Patently, such instruction can come only from a teacher skilled not only in working in the particular art field but in sensing the needs of the young child struggling to express himself.

The predicament of most nursery-school teachers is, therefore, insufficient preparation for such teaching. The result is a vague philosophy. An example of the latter is the frequency with which various constructive activities, such as playing with clay or with paints, have carried the burden of "art education." It cannot be flatly stated that these activities are or are not contributing to art education, but it is a fact that the child's manipulation of them does not justify them as such. The manner of their use in the light of the development of the child under consideration will answer the question. Probably the solution, until better teaching in this respect is more generally available, is a frank admission that few nursery schools are equipped to give real education in any or even one art from the creative standpoint.

That this is the case is anything but hopeless. In fact, there is question as to whether the teaching of real creative art is advisable during the preschool years. If the nursery school develops a child who, by his fifth or sixth year, has acquired a real liking and appreciation for one or two of the arts and, along with these, enough enjoyment in expression to further his interest, that school has probably fulfilled its function well. If this is true, it is fortunate that most nursery-school teachers can more easily stimulate appreciation than creation. The task is not easy, for it involves supplying examples of art in good quality and in form to interest children, but it is possible. It is to be hoped that the ultimate clarification of philosophy in this field of the child's education will stimulate the working out of suggestive curricula.

Literature[1]

As for literature for children of this age, it is hoped that each child:

1. Will be interested in literature and will learn to enjoy literature of good quality
2. Will have contact with a variety of types of literary expression and enjoy more than one type (Beyond the first classification of prose and poetry are variations in form, style, setting, imaginative and humorous qualities, type of vocabulary, and emphasis on sound and rhythm.)
3. Will be interested in both new and renewed literary experiences
4. Will become familiar with good literature of a kind appropriate to his understanding and ability to enjoy
5. Will find literature imaginatively stimulating
6. Will have a real personal reaction to literature, that is, will respond affectively to some poetry and prose
7. Will feel free to attempt expression of a literary type, realizing that such expression is possible

The books provided in each group are used to further the above aims and are, as nearly as possible, suitable for use with children of the maturity and with the background of those in the specific group. They are of good quality, representative of a wide variety in subject and form, and adaptable for various kinds of use.[2]

Literature is included in the school environment in many ways. Stories and poetry are read to children either in groups or as individuals. They are read at any appropriate time, by request or in connection with another activity or experience, or at more or less regular times. They may simply be read through without comment; they may be discussed informationally or appreciatively; they may be the commencement of activities of an imaginative, dramatic, or creative nature.

[1] Books used as sources of information are discussed in Chapter VI

[2] A list of books used in the preschool laboratories is included in the Appendix, p. 365

Books are available so that the children may look at them as they wish. They may do so in order to go over a story to themselves, for the pleasure of looking at a book, for the satisfaction in looking at pictures, or just to be occupied quietly.

The nature of appropriate activities and literary experiences varies considerably within the range of the preschool years and even within one school group. The length of time during which a child's interest holds, the number of children possible in a listening group, the need of freedom from distracting extraneous influences as well as the degree of constancy of attention in the experience itself, the holding in mind of a single plot, the number of characters comprehended, the degree of familiarity with the content and vocabulary, the interest in sound, in repetition, and climax, all are to be considered in providing literary experiences. In general, two-year-olds are able to listen for only a few minutes except in groups of two or three children. They are easily affected by their surroundings and diverted by incidents or pictures in the story, cannot follow much of a plot or more than one or two characters, are considerably limited in experience and vocabulary, are attracted by a mild climax, and are attentive to and interested in sound and repetition. The picture of the five-year-old is very different. He becomes absorbed in a story so that he is, when interested, relatively unaffected by environmental distractions. He may listen even in a school group for twenty minutes or more if he does not become physically restless. Short deviations from the main plot do not confuse him. His experience and vocabulary have increased greatly since his third year and to such a point that words do not interfere with understanding the main plot. He can follow a fairly large number of characters, is interested in climax, and is able to follow a story read over a period of several school days.

Between these two stages of maturity there is a wide difference, and the developmental picture needs to be kept in mind by the teacher. Two-year-old children enjoy stories

suited to their age level, but unfortunately there are few such stories available. In First Group, stories[1] are read to one, two, or three children at a time in a small room near the playroom. These stories and poems have a reading time of from thirty seconds to three minutes each. The story period for this small group of children lasts not more than ten minutes and usually about five minutes. At the beginning of the year, the period is even shorter. The stories are read without illustrations. Near the end of the year, these children have become so absorbed in stories and so accustomed to listening quietly that a group of eight or ten children is possible for about ten minutes. It has been found that these children remember the stories, dramatize them simply, talk about them at home, and, although fond of all of them, variously acquire favorites.

Other experiences in First Group come from looking at the picture books and illustrated books that are provided, from handling the books and carrying them around, from joint comments by two or three children looking and pointing to pictures and books, and from casual discussions with the teachers.

In the three older groups probably more of the listening activities are of a group than of an individual nature. There is a wider variety of literary experiences. Each teacher adjusts the environment to the level of her particular group. Although poetry is read to the children in all the groups, there is no direct stimulus to memorizing until the five-year level. However, some of the four-year-old children do remember poems and wish to say them to the other children.

The thoughtful, quiet use of books by individual children is definitely encouraged. In order that looking at books may be thought of by the child as a definite activity rather than as a bridge between one activity and another, the teachers give much thought to providing time for it and encouraging it by a careful selection and use of the books. They foster this activity as they do any creative or appreciative activity on

[1] Those used are for the most part the thirty-five Conant (Reference 221) stories, Mother Goose rhymes, and selected poetry.

the part of the child by their interest, willingness to take part in a situation, and responsiveness to the child's own enthusiasm. In First Group, the teacher puts books on tables at times when she thinks this activity appropriate for any child or for the group. When these books are in use, she is near by to help or give necessary supervision. In Second Group, books selected each day by the teacher with reference to the interests of the group and of individuals are placed on low shelves and are available at all times. In the group for four-year-old children, this procedure is followed at the beginning of the year and on many days throughout the year, but more frequently books are put out only at times during the day when the children have time to look at the books thoughtfully. In Junior Primary the books are all on open shelves but, owing to the more definitely scheduled program, the children are not free to use the books at all times. Although this series of procedures may seem inconsistent, it follows a definite philosophy related in part to the given situation. The youngest children have to learn that books are not merely manipulative materials. Three-year-olds enjoy and profit from looking at books when they wish and for short times. However, because such availability may result in a casual attitude toward books and because this may carry over into the next group, where the material surroundings are the same, it has been found that a change in procedure in itself makes the experience more interesting. Also, it is felt that the casualness is somewhat counteracted by encouraging the idea that one needs time to look at a book. The teacher is also enabled thus to stimulate interest by varying books for the group and for individual children.

Some of the teacher's activities in regard to literature hold true in all the groups. The specific books and the total number of books available on open shelves at any one time are subjects of consideration. It is possible that having too many books available will, with any but the most mature children, result in a tendency on the part of the child to look through books hastily, merely glancing at the pictures, turning pages

rapidly, and becoming somewhat stimulated by activity. This is thought to be a less desirable practice than looking at a book thoughtfully and in a leisurely manner. The teacher knows the welcome an old favorite will receive after it has been put away for a while, as well as the pleasures of a new book. In her selections, she takes into consideration the rest of the program, the activities the children have been interested in, and subjects of a seasonal nature. She pays attention to the child's attitude toward books reflected in his care of them and consideration in their use. She attempts to encourage the child's care of the book indirectly by inducing in him a liking for the book and an attitude which results in composure rather than great activity and excessive manipulation. Most children need more direct suggestion and caution, however, and some eventually may need deprivation of book privileges until they learn more self-control. This applies to children who understand but are customarily careless rather than to younger children who are not yet in full control of the rather fine coordinations involved in turning pages or to others who have accidentally harmed books. That a child have sufficient time to look at a book, that he do it in a careful way and where injury to the book is not imminent are general precautions pointed out to him. Beginning in Second Group, the children are taught to turn the page at the upper right-hand corner and with only one hand. A child in this group will need to be reminded to wash his hands if they are dirty when he starts looking at books, but many four-year-old children are old enough to think of this themselves. Certain expensive and beautiful books are not available for the children's use without some supervision by the adult. This fact may also contribute toward a realization of the need of care.

In reading or telling stories or poetry to children, the teacher tries to be clear and naturally expressive. Her own pleasurable reactions to what she is reading are important. In general, she avoids a dramatic presentation unless she desires to secure an active response from the children. She sits

near the children. She takes care that when illustrations are used they are easily observable by all the children. She realizes, however, that too large a proportion of pictures may distract from the story itself. Although she may show some illustrations as one means of making a story more real, she is careful not to accustom the children to pictures so that they always ask for them. It seems possible that too much dependence on pictures may not sufficiently challenge a child's own images and imagination, may interrupt the story experience, and may, as a result, detract from the words and sounds which are, after all, the substance of literary experience.

Graphic and Plastic Art

In the following three sections the activities relating to art in the preschool groups are described. The two- and three-year-old children are included together since the programs are similar in the two groups, variations being more frequently on the basis of individual differences than on the basis of age. In general, the experiences at these two younger ages are connected with becoming familiar with materials and experimenting with them. The children are gaining satisfaction from the material itself and are learning not only that it may be a source of pleasure to them but that their experiments and efforts may be made quite independently of adult criticism and suggestion. As they become more awake to the possibilities of enjoyment, they are also gradually acquiring the conception of these materials as means of expressing feelings and ideas. In the four-year-old group the integration of other activities with art experiences becomes more apparent. Finally, in the case of the five-year-olds, a more definite program is set up in terms of activities designed to stimulate the child's understanding of expressive possibilities and to give him some of the more elementary skills.

It need scarcely be indicated that these accounts are not exhaustive. They are illustrative in character, and the descriptions themselves vary with differences in the programs.

Art for Two- and Three-year-old Children

In these years the child is having his first experiences with some of the art materials, and much of his time in these activities is occupied in experimenting with their use.

In First Group crayons are usually made available rather early in the year. The children who wish to use them sit at a table and use large sheets of unprinted newspaper or construction paper. Each child is given a box of large crayons. Some of the children make long sweeping strokes, some of them seem merely to scribble, and others take great pains to make their lines in certain directions, though usually no object seems to be represented. Occasionally the children name their drawings from the beginning, and there are a few drawings which really resemble the name.

After the children have become more accustomed to the school, they use paints. They wear oilcloth aprons and paint on large pieces of unprinted newspaper fastened to easels. The paint is liquid (powdered vegetable colors mixed with water) and is put into glasses which are set down into round holes on the easel ledge so that they cannot tip over. The children use round brushes about a half inch in diameter, with thick handles which are easily grasped. The easels are set in the small playroom or in some other place so that the children who are painting will not be distracted by other activities.

At first each child is given only one color of paint. He is shown how to dip his brush into the paint and how to wipe it on the edge of the glass each time so that the paint will not run down the page as he works. If he holds the brush in a decidedly awkward manner, the teacher shows him an easier way, and if he scrubs the paper with the brush he may be shown how to make light strokes. For the most part, these are the only techniques taught in First Group.

When the children have gained some control, they may be given two, three, or four colors at a time, each color with a separate brush. This seems to increase the interest and enjoyment greatly.

The children seem to enjoy the colors of the paint and they experiment with different ones, sometimes one on top of the other. The paints are used in a variety of ways. Some children seem just to scribble and tend to lose interest rather quickly. Others work very carefully making circles or other figures, sometimes making the outline of one color and filling in with another color, being careful not to run over the edges. Some children make very careful and even lines in rows, others cover the whole page with one color, painstakingly painting every part so that no white places show. A few children name their objects, and in some cases, when the name of the object is known, the teacher can see some resemblance. For the most part the paintings are not named.

As the children paint, the teacher may make such comments as, "What a bright red. I like it next to that blue," or "Nancy is using some blue paint and some yellow paint" or "You are covering the whole paper up with smooth color." Sometimes the children's work is put on the wall, one painting of each child's usually being chosen.

In the three-year-old group much of the fostering of aesthetic development is indirect. The essential factors are a provision of materials and opportunities for using them. Most of these materials and tools are accessible to the children early in the year. Although the child is generally free to make use of the material at will, the teacher may set up the equipment as a definite reminder and stimulus. Furthermore, if a child day after day uses the same material, an attempt is made to interest him in other mediums of expression. No effort is made to confine one activity to a particular room. When the weather permits and the children can be outdoors throughout the morning, much of the equipment is set up in the yard. The easels may be placed in an unobtrusive spot where there will be no interruptions by those children more interested in riding wheeled toys. Tables may be carried out so that some children may cut, paste, or color as they wish.

The materials for painting consist of easels, squares of brightly colored oilcloth on which the easels stand, oilcloth

aprons varying in color and pattern and bound in colored tape, large sheets of unprinted newspaper, and paints in four colors—red, green, blue, and yellow. The brushes have long handles which the child may easily grasp without cramping his fingers. Each child selects the colors with which he wants to work.

Occasionally a child is discouraged by his inability to keep his colors from running together. Very soon after the children have their first experiences with painting, it is explained that paints do not run so readily if the brush is wiped off on the side of the glass. It is also explained that the colors will not be clear if a brush dipped in one color is used with another color. No suggestion is made as to the result. If the child calls the teacher's attention to what she has made, some remark may be made such as, "Would you like to tell me about it?" or the teacher may comment simply, "That red stands out clearly." A direct question as to the result expected may kill the child's interest or force him into naming the picture.

Early in the year many of the three-year-olds are interested primarily in covering the paper quickly and then going on to another page. As they progress, they experiment with colors. Soon some of the children begin to explain their pictures, Margaret says, "Do you know what this is?" The teacher, who is unable to interpret the lines, reverses the question, "Perhaps you would like to explain it to me." The children stop their work as the teacher holds one of the paintings before the light. They talk about the colors; then someone sees the back of the picture and wants to look at it on the other side. Margery has drawn a picture of the bunny and she asks to post it on the wall above the rabbits' cage. Some one announces, "Here's a snake that's going round and round, round and round. I'm going to take it home." Very often, by seeing that a drawing goes home with a child who seldom takes part in the painting activity, the teacher will provide a stimulus for further activity on succeeding days.

After the children have had an opportunity to experiment with paints and have to some slight degree sensed the difficulties involved in expressing their ideas, a skilled artist may

be asked to come to the school to make some drawings for the children. Whenever possible this person is a parent of one of the children. The pictures are simple and usually follow the suggestions of the children watching. Mildred exclaims, "Draw my doll," and runs to hunt for it. Martha thinks there should be a cradle for the doll. Some of the children seem surprised to see familiar objects taking form on paper and wait eagerly to see what comes next. Easels are ready for any children who express a desire to have a turn.

In First Group clay is used quite frequently. The children who wish to use clay wear oilcloth aprons and sit at small tables under which have been spread large pieces of oilcloth to protect the floor. Each child is given a large piece of clay, equal to a cube of four or five inches on each side. Small pieces seem to encourage work with the fingers only, rather than with the hand as well. The children are arranged in such a way that they have adequate room and are not distracted by other activities. Often three or four children use clay in the small playroom, but at times the interest is so great that most of the children are engaged in the activity at one time.

The clay is used in many different ways, some of the children pounding and patting, some pinching and poking, and some working diligently to make the clay take definite form. Some make smooth forms, balls, round flat objects, or pillar-like forms. The children seem to enjoy the form of these and to take pleasure in their smoothness. Occasionally the objects are named and even take on the form of the names.

If the children wish, their clay objects are saved, and occasionally are painted the next day.

Very little is done in the way of teaching technique. If the children persist in patting the clay and do nothing more, the teacher may show them how they can take it up into their hands and work it into forms. Often the teacher sits down and works with the children, but she simply manipulates the clay into various forms, not making objects beyond the limit of the children's abilities. For the most part her activity shows the children a manner in which they can use

the clay to more advantage than by simply patting it. Sometimes she shows a child how he may roll a ball or do something else which he wants to do and with which he is having difficulty. She makes no suggestions which would make the children feel that their activity must represent objects. If children name their objects, even though the object looks nothing like the name, usually no suggestion, criticism, or comment is offered.

The children in First Group show much interest in clay and continue this activity for long periods of time; some children have stayed at clay for as long as an hour, though other activities were going on throughout this time.

In Second Group the children derive considerable pleasure from handling the material. They roll it on the table, punch holes in it, flatten it out. This goes on until they get the feel of it. One child discovers that his work looks like Black Sambo's pancakes, one is rolling his into balls. As he arranges them in graduated sizes he comments, "Here is the teeniest one, this is the tiny one, this is a little one, and here is a great big ball." At one table two children begin to tire of their clay and they spread it over the table. By chance they discover they can make designs on the table. Occasionally a teacher sits with the children and models something, perhaps a dog or a house surrounded by a fence.

In this group, at first, paste is used much like paints and when all the paper is covered the children seem satisfied with the result. Gradually they come to realize that two pieces of paper will stick together and then they become interested in combining different colors of paper together. One day Paul announces, "This is a road and here is the car going down the road" as he tears a strip of paper and pastes it on a large sheet of paper. Then he rolls another smaller piece to make the car. Judith, sitting at the same table, is busy pasting one piece of paper on top of another which she states is a mountain. Some of the children need help with technique. At some time in the child's experience with paste, the teacher may show him how to wipe off the brush on the edge of the jar, apply

the paste to one side of the paper only, and remove surplus paste with his brush. In most of the pasting, pieces of paper of all colors are used, so that the teacher has an opportunity to comment about color contrasts and combinations. In all these activities there is satisfaction in sharing what they have accomplished with others. The comment, "See what I made," probably brings several children to look at the product. At certain moments they seem to want praise and acceptance of what they have created.

The aim of any guidance in either group is the cultivation of art appreciation. Many materials are to be found in the environment of the schools which have been selected with the thought of their aesthetic appearance. The pictures on the walls are chosen and placed with the children's interest in color, design, and subject matter in mind. Various equipment such as tables, chairs, and curtains is chosen with a view to fostering appreciation of color and design. There are the daily experiences with beauty, the sun shining through the etched windows of the front door and casting shadows on the floor, the colors in the soap bubbles which the children are blowing. Even the adults' smocks and the children's own clothes provide an occasion for comments. Harry says, "I like that dress. It's a pretty color." Buckles, buttons, or other trimmings are examined and handled. There is pleasure in feeling the softness of various fabrics such as velvet, satin, or silk. When they look at the airplane passing overhead, they notice the clouds in the sky. There is a riot of color in the flowerbed. Louise asks permission to cut some flowers and arrange them in a vase. In the fall Caroline has picked up leaves on her way to school. She wants a vase to keep them in. She pauses while she decides in which colored vase the leaves will look the best. A cardinal is on the feeding station outside the window. Several children stop their work to tiptoe to the window to see his brightly colored feathers.

Joyce inquires if she can choose which picture can be put into the frame. She looks carefully at each picture laid out on the table before she makes a choice. "I think I would

like the one of the goats." Joyce helps remove the other picture and substitute the new one. As they finish fastening it she says, "Let's see how it will look" and stands back to look at it as it is being hung on the wall. Parents begin to arrive and must be brought in to see the sunset in the picture.

Third Group

The four-year-old is aware of the beauty that is about him. With this awareness as a first step the child is encouraged to become thoughtfully appreciative of this beauty. For instance, if he chooses a picture he is encouraged to state his opinion concerning that picture. It may be that he likes the color, at which point the teacher may add that the color is a bright or brilliant one. If he is pleased with something very tiny in the background, the teacher may explain that the artist has made it possible for us to look into the distance. Because the artist has made things near to us or far away from us, he has used what we call perspective. For some four-year-old children it may be enough to know that the color is bright or that the picture shows things close up or far away, but many children in the group are ready and eager for the next step, and although they may not grasp the entire concept, they are adventuring beyond their present knowledge in art.

Although pictures are by no means the only form of art through which the teacher encourages the four-year-old's appreciation, they are one of the more tangible means by which she may guide the child in this direction. For this reason pictures, mounted individually on heavy cardboard and covered with cellophane, and placed on the bookshelves for the children to take out and look at, have become part of each week's plan. For this purpose and for wall use a permanent collection of pictures is being acquired.[1] The children select a few pictures from the shelves and take them to the tables to look at them. These they exchange with other children; the teacher, going about from table to table, exchanges comments upon the pictures with each child. When a child shows a liking for

[1] A list of pictures is included in the Appendix, p. 356.

a particular picture, going back to it again and again or spending comparatively long periods of time studying it, the teacher sometimes remarks on the quality of color or general lines of the composition. The child enters into this with the teacher, asking questions, volunteering information, and exchanging opinions.

The child's own surroundings are planned to afford a rich experience in color and color arrangement. Pictures for decorative effect are selected and rearranged from time to time to fit into this general plan.

Books are also chosen by the teacher and placed on the bookshelves with the definite plan in mind of interesting the children in the line, color, and general treatment of the illustrations. The children are exposed to such richness and variety of illustration as may be found in *The Tale of the Wee Little Old Woman*, *In the Mouse's House*, and *The Picture Play Book*. They are encouraged to have favorites but at the same time to realize that each illustrator has his own way of telling his story in pictures. This often leads directly into a discussion of what the children themselves would have done if they had wanted to portray the story to some one else. Thus the child is carried over from appreciation of art to an attempt to create art in his own terms.

One occasion which may serve to illustrate the outcome of such a challenge occurred after a discussion of the Ritter illustrations of *In the Mouse's House*. Each child chose his own medium for illustrating this story. Two children used the water-color paints at the easel. One of these children drew what he considered Auntie Twinkletoes, using for the purpose bright red paint. The other drew shelves in a ladder formation and on each shelf put the vegetables which the mice brought up from their cellar, being careful to have each vegetable placed on the correct shelf and demanding a rereading of the story in order to get the carrots, cheese, and cauliflower exactly where they belonged. Another group of children built the "mouse's house" with blocks. When they had built the cellar they were disturbed because there were no vegetables to

store away. At this point a child disappeared and was gone for some time, returning with a white sheet of paper on which were carefully drawn in crayon some cheese, cauliflower, beets, and carrots. This she presented to the others, who looked it over, commented upon it, and finally accepted it as satisfactory, placing it on their cellar shelves.

Another time the children who had been listening to *The Tale of the Wee Little Old Woman* were interested in making the characters and setting for the story in clay. One child chose to make the wee little house while another made the wee little table and the wee little chairs to go inside the house. One of the boys, busy for a long time, finally announced, "I made some logs in the woods where the cat ran away to." When questioned concerning the round thing on top of the pile of logs he explained that it was a ball for the cat to play with during his stay in the woods. Another child made the wee little kitten but no one made the wee little old woman. However, one of the children chose to paint her story. She made every character, not forgetting the wee little old woman or the wee little cow. When finally all the children had completed their representation, it was found that between them they had included every important character and every necessary item in the setting.

The group is not always enthusiastically concentrating upon one story, nor is the individual child's freedom limited, even at such times, by the exclusion of all other interests. Upon one occasion when a group of children were modeling in clay the characters from *Now Open the Box*, one child went into another room and began to paint what she called "a little girl's dream." She looked up at the teacher and asked earnestly, "It could be a dream, couldn't it?" "Yes, it could be," reassured the teacher. "It could be a little girl's dream all in bright colors." Thus reassured, the child completed what to her at the moment was perhaps more important than entering the activity of the group. On other occasions this child is eager and enthusiastic in entering into any activity upon which the group may be engaged.

Children in this age group are interested in building and are beginning to plan their buildings, the outcome of which is often not only adequate for the child's own purpose but also pleasing to the eye. Because the teacher wishes to keep the children challenged in their own building plan, she not only attempts to make them aware of the architectural plan of the buildings in their own community but also in pictures of various types of buildings. For example, a child may construct a building with two towers; with reference to buildings which he has seen in his own community and in pictures, he has discussed this type of balance and he is now reproducing it. Some of the children in the group were particularly interested in arches and columns. One of the boys, who had up to this time built square doorways, began to construct arched doorways in his houses. The other children enjoyed the effect and commented upon it, one child volunteering, "It looks good. It's round at the top."

The child is not limited to clay, blocks, paint, and such familiar supplies to express his ideas in design and arrangement. He is encouraged to adventure with other materials. For instance, a child comes into a room where, on a table, he finds a basket of freshly picked flowers and autumn leaves. Near by are flower bowls and holders of different sizes and colors. He is free to select and arrange as he wishes. Then he may place his flower arrangement on the particular shelf, table, or window ledge which he may choose as a satisfactory surrounding for it.

Among many other activities he may plan and carry out his own designs for the Christmas-tree ornaments. He, himself, puts these ornaments on the tree, standing back to get the effect. Some of the children choose the pictures for their own bulletin boards. These they hang by themselves, getting the help of other children to see whether they are straight.

In all these activities the enjoyment and interest among the children is contagious. The honest enthusiasm of both teacher and child is an essential element in the enjoyment.

Music

Music is a part of nursery-school life. From the child who cannot begin to carry a tune, but who contentedly hums one or two notes while he builds with blocks, to the one who has a command of twenty or thirty songs or his neighbor who derives real satisfaction from listening quietly to singing or victrola music, all feel free to enjoy music as they will.

A song may start because a child or his teacher thinks of it in connection with an activity or the subject of a conversation. Or it may be of a rhythm suggested by a parade which is forming, by a horseback ride already in progress, by a swing, or by a bouncing ball. It may be sung by one child. Two or three together may be interested; possibly the whole group of children may take part, or only the teacher may sing. While it may be a well-known song, it is equally likely to be a new one which one child has heard somewhere outside of school or which the teacher may think the children will enjoy. Or, instead of a song, it may be piano music commenced because the teacher feels that the mood of the music she plays, or the words of the song it accompanies, or the rhythm it suggests either will enrich an activity already apparent or will in itself be welcomed and enjoyed.

On the other hand, the child who listens to the sound of a gong he has struck, or a bell, or a drum, or single piano notes, or a tuning fork is having real experiences in the beginnings of musical sounds. So also is his companion who with a single tone is experimenting with different tempos of successive notes and different rhythms; he is listening to himself as he beats rapidly, or slowly, and if he can produce rhythmic succession, he is making patterns of rhythm.

All these experiences and many others may occur throughout the day. Usually there are certain times when the teacher particularly plans them, but this in no way precludes them elsewhere. Although she makes these activities as attractive as she can and thus encourages interest, the participation of the child is in no way coerced.

The teacher's aim for each child is that he enjoy musical experiences. To this end she is conscious of including music in the school environment and of trying to stimulate that degree of participation by a child which is within his ability and which is coincident with his enjoyment. For the least developed children opportunities to hear music, and to hear it under natural circumstances, are important. Also it is hoped that the child will learn to identify himself with music, and to this end any bodily movement he makes as a response to music is encouraged, not so much by praise (which might encourage self-consciousness) as by tacit acceptance and providing of further opportunity. Also at these earliest stages opportunities to experiment with different kinds of sounds are provided. As far as songs are concerned, few two-year-olds sing with accuracy, but they greatly enjoy hearing in musical form rhymes or words with which they have become otherwise familiar and usually do all they can to participate in the singing.

As children gain more control of their voices, interest in songs becomes more prolonged and they are eager not only to sing the older favorites but to learn new ones. They may begin to enjoy listening to each other and singing to each other. Furthermore, they gain increasing satisfaction in listening to music and when they reach this point their musical horizon broadens rapidly. Some two- and three-year-olds and many three- and four-year-olds appreciate with considerable sensitivity music that they hear either through piano or other instrument, voice, or victrola. They take pride in recognizing music; they are interested in facts about the music—the name of the piece, the composer, or the artist. They want to know about instruments.

It is true that wide individual differences within a group are the rule rather than the exception. While many four- and five-year-old children have formed the basis for musical enjoyment throughout life, provided this foundation is built up in later school years, there are some children of equal age whose ability to sing is only commencing or who may not be

particularly interested in music. Thus the teacher's problem is considerably accentuated. There is experimental evidence to indicate that appropriate environmental stimulation during early years may accelerate not only musical ability but interest. It is possible that the opportunity to sing with only two or three other children is helpful in that a child just learning to sing thus gains not only confidence but more frequent practice. Subsequently, increased participation may stimulate interest. Whatever the explanation, if music is related to other parts of the school program, if it occurs under happy circumstances and more or less spontaneously, if the child's abilities are utilized and challenged, if his experiences with music are suited to his comprehension and not accompanied by distractions, he will probably learn to think of music as a source of enjoyment.

As is the case with education in art of all types, the good quality of presented material is considered as well as the child's level of interest and comprehension. Many songs of the traditional and folk types have a real musical appeal. Superior quality in instrumental compositions is entirely in keeping with the children's interests. Songs should be chosen more for their musical value than for their words, although the words are important. Fortunately, there are many songs meeting standards in both respects.[1] Through experience it has been found that children may be as easily interested in recognizedly good music of all types appropriately chosen as in some types purposely written for children or simplified for their use.

The relation between rhythmic activities and musical experiences is at present none too clear. Two-year-olds probably benefit from voluntary bodily reactions to music. They enjoy it and thus learn to respond to music. Before long, however, most children somewhere in their environment become exposed to the idea of "dancing." Moreover, it would seem that the relation between "dancing" and "rhythms" is in

[1] Lists of songbooks and victrola records in present use in the preschools are included in the Appendix, p. 359, 376.

need of considerable clarification. The entire question concerning the dance at the adult level in its relation to music and the dance as being interpretative are matters under considerable discussion. Moreover, the function of education in rhythmic bodily movement in these early years is as yet unknown and will depend upon a clearer emergence of this art form in future years.

If the child wishes to express his response to music by moving with it or dramatizing it, he is by all means to be encouraged. To stimulate such activity in a group may be questionable, however, inasmuch as the response may become systematized rather than individually expressive. If children like to skip with music, or run with it, or jump with it, so much to the good. It may well be remembered, however, that this is only one way of linking music with a pleasurable experience, that this activity is either a means to the enhancing of musical enjoyment or a part of a carefully planned program of education in rhythmic bodily movement.

Music Activities in the Preschool Groups

The following descriptions are included to give some idea of the nature of the music program. Because of the wide range of abilities in the two groups, the two- and three-year-old children are discussed together. The activities discussed are illustrative, but every activity is not discussed for each group nor are these activities invariable.

Music in First and Second Groups. Contacts of the two- and three-year-old children with music are most informal. The children experiment with instruments, sometimes listening carefully to the different sounds and perhaps comparing them. For instance, they may listen to the difference between the sound of the xylophone and of the table top when they are hit in the same way. Occasionally a child wanders over to the piano and touches one key and then another, showing real interest in the sounds which are produced. Later he may sit at the piano and play and sing to himself. Misuse of the instruments or mere pounding of them as a form of motor

activity rarely occurs, but if it does the teacher may say, "It sounds better if you touch it gently," or "If you use only one or two fingers at a time on the piano it makes softer music."

The teacher's part in these beginning musical experiences increases gradually. She may sing or clap rhythmically to some spontaneous rhythmic activity which has arisen, thus accentuating the rhythm. For example, shortly after the start of the school year, two children were rocking on the rocking boat. The teacher sang, "Choo, choo, choo, the train will soon be going. Choo, choo, choo, let's hurry and get on." The children soon started to rock with a more pronounced rhythm, and enjoyed the activity. As they rocked they sang on one note, "Choo, choo, choo."

A little later in the year as the children begin to feel more at home in the school situation, the teacher sits down at the piano and sings, or she may sing unaccompanied. The children gradually draw near and listen to the songs. Only a few songs are sung on any occasion, but each one is often repeated several times. Not more than one or two new songs are introduced during one day. As time goes on the children have favorites, for which they ask. Some of the children gradually learn the words and the tunes, so that in a few months' time several of the children can sing some of the songs, remembering most of the words and making quite a good approximation of the tune. Some of the children learn the words and sing them, not keeping the right tune; some of them hum with the music, also not in tune, and pay no attention to the words; some show much interest in listening and ask for their favorites; and a few children show little interest, though they may occasionally join the group for short periods of time. For the most part, the children join or leave the singing group as they wish. Occasionally a teacher may suggest to a child that there is room for him in the group, but she uses no pressure if the child does not wish to enter into the activity. If a child persists in showing no interest in joining the group to sing, the teacher may sing to him alone on occasions, if he

seems to enjoy this. Singing is not scheduled at any certain time, but may occur whenever the children wish. However, if the children do not ask for it, a teacher may start the activity, letting those who wish join. The groups are always small (not more than six or seven children), simultaneous activities being arranged in another part of the building.

In the two-year-old group either the piano or the victrola is used to stimulate rhythmic activity. The piano proves much the more satisfactory for this, since it is more adaptable. Music may be started for the purpose of accentuating some rhythmic activity which has arisen spontaneously. On the other hand, the teacher sometimes initiates rhythmic activity. At first the two-year-old children do not respond very actively. One or two may bounce up and down to the music and perhaps some one will sway back and forth. Sometimes wrist bells are given to the children and one of the teachers may shake bells to the music. Usually the children join this and seem to feel the rhythm of the activity more and more. The triangles or the xylophone may be used also for this purpose. Gradually and spontaneously the children begin to react more and more to the music. They begin to march, run, and to stride along in long swinging steps, some of them keeping excellent time. Sometimes they use the wrist bells as they dance about, or sometimes they use pieces of cloth, waving them in the air as they go. On one occasion a vase full of daffodils was on the table. One of the children took one and, holding it by the stem, waved it in a graceful manner as he strode along in time to the music. Soon each child held a flower. This activity came entirely spontaneously, and the children seemed to gain great satisfaction from their response. In no case were the flowers deliberately used in a rough manner.

Occasionally the teacher may clap out the rhythm, or if it can be done in a way which will not embarrass a child at all, she may take his hand, walking with him, keeping time to the music herself and trying to go just fast enough so that he will fall into the rhythm of the music. Aside from such instances

as are indicated here, the children respond in an entirely spontaneous manner.

Times during which children listen to music in these groups are short, usually not more than five minutes in length. Singing, vocal or instrumental music played by the victrola, or the playing of instruments directly in the group may occur incidentally or as planned activities.

Toward the end of the year in First Group and throughout the year in Second Group, several musical instruments, such as a violin, a flute, or a French horn, may be brought into the group one at a time. The teacher and the musician who is to play have already decided which selections shall be used. They are simple and sometimes cut so that they will not be too long. Some familiar melodies are always used as well as some new ones. Although the first time an instrument was brought into these groups, it was done in an experimental spirit, the children showed such keen and lasting interest that the procedure seemed well worth continuing. The children who wish to do so listen to the instrument and occasionally name selections which they wish to hear. They are also permitted to see the instrument at close range and to touch it carefully. They are told the name of the instrument. When possible an instrument is used in the group more than once. Instruments which seem to have been the most enjoyed are the violin, the flute, and the clarinet, although others would undoubtedly prove of interest and value.

As the year progresses, the children tend to create short songs or chants of their own. If it is possible, the teacher tries to reproduce the child's song and tune. This interest is encouraged to a reasonable degree. If it reaches such proportions that one child is monopolizing the attention of the group or it is being done to the exclusion of other interests, the teacher may limit the time given to it. The value of such experiences is felt to be for the child who is creating them, in helping him to enjoy music and in having a personal response to it. Too great a proportion of such activity may limit the child's other

experiences and his growth musically, as well as cut short the musical experience of the other children.

Music in Third Group. Music is part of the whole activity of the four-year-old. He has become accustomed to listening to good music as he would listen to a good story. He has become used to stating his desire for a certain piece of music just as he would suggest a title of a favorite story or picture. In fact it is so much a part of his feeling for rhythm that often he says of a piece of music "tell it" and of a poem "sing it."

One of the four-year-olds listening to *The Song of the Nightingale* said, "That's my favorite. That's my dream." Later on that day when the children were talking together in a group she asked to tell her dream to the other children. Upon the teacher's assent she asked for "that bird song." When the music started she began to dance about the room, the other children watching her intently. When the music ended, she again took her place in the group. No comment was offered and the whole procedure was seemingly satisfactory both to herself and to her audience.

Upon another occasion three children were painting at easels in various parts of the large playroom. They were intent on their work and paid little attention to each other. However, each in his own way was painting what he called "musical notes." The painting had started upon one child's suggestion but was being carried out as each child wished. The teacher, standing near, suggested, "Since those are musical notes, perhaps you would like some music." "Yes," responded Jean and Peter but Mary seemed to be too busy to reply. The music first played was *Bolero.* Though Mary had started her musical notes in yellow and Peter and Jean in green each changed during the first part of the music to painting in red. At the end of the selection Jean called out, "Play some more." This time a movement of *Scheherazade* was selected by the teacher. All three children continued to paint in red. The teacher pausing near Jean remarked, "You have red musical notes." "Yes," replied Jean, "It's red music. This is red music too." Next *The Congo Lullaby* was played and, much to the interest of the teacher, Mary put down her red brush and started using a pale blue while Jean

and Peter changed to yellow musical notes. Peter remarked, "That's soft music."

To the teacher's knowledge the relating of color and music had not been suggested to a child at any time and had not occurred before. This incident is included merely as an illustration of the fact that these children were responding to the music. Both illustrations seem to indicate ways in which musical experiences cause real feeling in a child.

The teacher does not always take part in these spontaneous responses to music but is often only the interested audience.

A child was painting at an easel. Another child entered the room and began playing the gong on the table near by. The child at the easel looked up and said, "Play soft music. Play a lullaby, 'cause I'm making rock-a-bye baby." The child at the easel continued to paint seemingly satisfied with the soft musical accompaniment. The only indication that the teacher had that she herself was noticed was a glance and a smile from the child who was contributing the music.

The whole setting of this incident, like so many similar happenings, was arranged and carried out by the children themselves.

Interesting as these happenings are, there is also plenty of opportunity for the teacher to plan about the children's interest and to give them good music to listen to. They are encouraged not only to listen to good music but to be intelligent listeners. Since the first step in being a good listener would seem to be interest, only those children who are interested in hearing the music are members of the audience. It has been found best to limit this audience to three or four children at a time. The children are invited to join and their stay is dependent upon their interest and attention. The teacher herself tries to vary the plan for individual children, noting not only the special interest of any one child in the group but also foreseeing any restlessness or lag in interest. She attempts to terminate the experience for each child at

the peak of his interest rather than run the risk of endangering the child's own future enthusiasm or jeopardizing the listeners' interest by permitting any one member of the group to disturb others who are listening.

A group may be invited to go into the "studio" to spend some time listening to victrola music. Here along with old favorites new music is introduced.

Some of the children having listened to *Scheherazade* (*Festival at Bagdad*) several times were able to distinguish the music of the harp. It seemed to be particularly pleasing to them to have this part played over and over again; when they heard it they would smile and nod to each other and say, "There's the harp." When a song by Paul Robeson was introduced and the children were told that they would hear him sing it, Bob asked, "Is it 'bout the black dove?" "No, Bob, this is called *Ol' Man River*." Bob had originally been particularly interested in *The Congo Lullaby* and became even more so after he had been told a little about Paul Robeson.

At the beginning of the year the children bring from their former background in music an interest in various kinds of music. Requests such as, "Let's have a marching song," or "Let's hear *The Whistler and His Dog*," or "I want *The Clock Shop*" are frequent. These continue to be old favorites, but each child adds a few more to his original list until the musical diet of the entire group has become more varied.

The children come together freely and spontaneously during the day to sing without the formality of piano accompaniment the songs which form part of their group experiences. The freedom that this sort of grouping offers, as well as the adaptability of such a procedure, where the teacher is an intimate part of all that goes on, has been considered sufficient justification for frequent group singing away from the piano. Songs are found and sung with more facility. Often songs which exist for the teacher merely in clear memory of their melody can be shared with the group at the exact time when their interest demands such a song. Just as one adapts the rhythm of music to the rhythm of the child when he marches or skips, so is the singing of a song adapted to the demands

of the group. Among the four-year-olds there seems to be a tendency for some to pitch their songs in a higher key while others invariably choose a lower one. The teacher, alert to such differences, can give opportunity for each child occasionally to pitch his own song. Such flexibility is better achieved with the small informal group, where one can take advantage of individual interest and characteristics, unless a school is fortunate enough to boast an extremely skilled and adaptable musician on its staff.

Small groups will listen over comparatively long periods of time, in most cases requesting certain music and sharing with each other the enthusiasms which arise from having these requests granted. From time to time, as the individual child's interest grows, the teacher adds here and there a few explanations which she includes in order to help the child progress as a listener. On every occasion a lecture or overdose of information is guarded against. Rather, a sensitive participation in the child's own enthusiasm is sought. Those children whose interest in music seems more pronounced than their interest in some other activities are encouraged to continue along this line.

In the program of this group daily provision is also made for a time when the children can sing together and to each other. There is opportunity at times during the week for individual children to move rhythmically to musical accompaniment, each one expressing the feel of the music in his own way. Also at some times during the week drums, bells, cymbals, chimes, triangles, and tambourines are made available to the group. A few children, choosing and taking turns with these, will play to piano or victrola accompaniment.

For the most part the children gather in an informal group. Sometimes the songbooks are held up for the group to see the songs as they sing them and at other times the songs are sung without the books.

Once when the children seemed interested in looking through the music books and picking out their favorites, a few of these were put on the shelves where the picture books are ordinarily kept.

Some of the books included were *Favorite Songs, Happy Songs for Happy Children, Songs We Sing,* and *Singing Time.* No mention was made of this change, but it was soon discovered by the children themselves who took the books off to various parts of the room where two or three of them gathered round a table, talking about the songs and singing them together. Most of the songs could be easily found by hunting for the illustrations. However, where there were no illustrations the book was brought to the teacher with the request, "Find the snowman song" or "Is this the Jacky Frost song?" It so happened that often the children were correct in their choosing.

Since much interest seemed to be the result of this experiment it has been repeated often and with the same results.

The number of songs the group knows usually grows during the year to such proportions that often there is not time enough to sing all those requested and some have to be remembered for the next day. New songs are added gradually. When a song new to the children is sung, it is often introduced very briefly by the teacher's remarking, for example, "Here is a new song. It's about a miller." Then the song is sung to the children. Often a quick response greets a song which is enjoyed upon first hearing, and it is not unusual for a child to call out, "Again. Sing it again." By the time it has been sung several times some of the group will venture to join in with the teacher. Quite naturally one by one the children sing until some of them are able to sing it all the way through while others sing only parts.

With a few exceptions children have songs or groups of songs which they call their "favorites." Nearly always these "favorites" are the ones which the child can sing best. In the beginning of the year no attempt is made to have the children sing alone except when one child asks to sing a song to the group. Gradually it comes about that a few children may stand before the others and sing to them, the others joining in. This happens quite spontaneously when the children jump up enthusiastically at mention of a song which they particularly want to sing. Sometimes the entire group,

of never more than twelve children, will finally be standing in a circle or semicircle about the teacher. One day the teacher suggested that Bob and Jean might like to sing *Frère Jacques.* It happened to be a song that both children had requested upon many occasions. On this particular day they both stood up, walked to the front of the group, and stood one on either side of the teacher as if it were the usual procedure. There were requests for other songs, and each time those children requesting the song faced the group and sang naturally as if they were enjoying the experience. Thereafter the children themselves adopted this method. They would sing as a group for a time, then at the end of ten or fifteen minutes of singing they would naturally swing back into their plan of singing to each other.

Such descriptions as have been given can of themselves give only a brief picture of one year's musical experiences of twenty-four individuals who are exploring the musical environment open to them. This environment varies somewhat with the interest and enthusiasm of the child. Nothing is set, but the emphasis is rather upon the adaptability and combination of such a program with the richness of other activities.

XI

Activities Related to the Educational Program

The Parent and the School

The nature and purposes of the preschool laboratories have become known in various ways to parents who enroll their children. Public lectures, reports in local newspapers, public showings of moving pictures of preschool activities, radio talks, and trips through the preschool buildings as well as the experiences of friends may make the first introduction to the laboratories. Informational bulletins in regard to the laboratories are sent upon request and actual observation in the laboratories is usually possible.

After a child is enrolled, frequent and varied opportunities are available to parents who wish to become better acquainted not only with the school but with the staff and activities of the Iowa Child Welfare Research Station. Such contacts are encouraged. Plans which are definitely made for school-parent activities and contacts and for parent education may be classified in four divisions: (1) conferences during registration, (2) teacher and school contacts, (3) contacts with other staff members, (4) provisions for the study of child development.

Parent Contacts with the Teachers and the School

Such contacts for a parent fall into two groups: (1) conferences with the head teacher of the group which the child is attending and (2) observation in that group or in any other.

Throughout the year conferences are held by the teacher and parent whenever either feels that a conference is advisable. Such conferences occur outside school hours, appointments being made by the teacher and parent directly. At the end of each semester a conference is held with one or both parents of each child; the teacher discusses the child's development and his needs, attempting to secure such understanding and help from the parent that the result will be beneficial to the child. Always the teacher makes an effort to speak in terms of objectives for the child and to cover in this conference a wide variety of his activities. She refers frequently to records of the child's progress. It is possible for the teacher to discuss the school program with the parent and at times to give specific suggestions of aid in purchasing new play equipment, books, and music. At times, she may help parents through suggesting means of guiding the child's home experiences. She attempts, also, to secure and make use of suggestions from the parent concerning the child in school.

The casual contacts which occur when the parents bring or call for the child are helpful in maintaining a cordial attitude. In addition, the teacher in this way is informed of minor variations in home behavior. It must be remembered, however, that the very casualness of these contacts precludes much systematic discussion of the child and, if they become too common, they absorb some of the teacher's time which should be devoted to the group or become undesirable substitutes for more organized discussion.

Certain records concerning the home and the child are regularly supplied by the parents at the request of the school. These cover information about home living conditions, family background, contacts with other children, habit training (including eating and sleeping), time with parents, and modes of discipline utilized in the home. Other records relating to specific activities or behavior of a more or less temporary nature are exchanged by parent and teacher.

Parents are urged to observe in the laboratories frequently after the first few weeks of the child's attendance. Whenever

it is judged advisable for this observation to occur without the child's knowledge, arrangements for such observation are made, if possible. At times the teacher will request the parent to observe prior to a conference, or a conference will stimulate subsequent observation. Whenever possible the teacher tries to make definite suggestions as to what the parent should observe.

Some parents may have other types of contacts with the school when, for instance, they come into the school groups for some special demonstration, *i.e.*, a mother who plays the violin, a father who is an artist, a brother who is a carpenter. Occasionally, a parent furnishes transportation for excursions.

In connection with the child-study groups conducted by the staff members in parent education, observations by the parents are regularly scheduled. The subject for observation is given and several suggestive subtopics listed. The mothers observe within a given two weeks' period. These observations are discussed in a meeting at which the head teacher is present to aid in interpretation of the observations.

Approximately once a month each teacher in charge of a preschool group holds a meeting with all the mothers of the children in her group. These meetings are for the purpose of acquainting the mothers with the aims and the activities of the school group.

A planned program of child study with readings, observations, and discussions is conducted by a staff member in the parent-education division.

Staff members other than the teacher meet and talk with the parents in regard to (1) special problems of the individual child, (2) securing data for research studies, (3) reports to parents concerning research findings.

The Staff of the Preschool Laboratories

The professional staff of the laboratories consists of the supervisor, four head teachers, eight assistant teachers, a part-time nurse, a part-time dietitian, and a secretary. The teaching staff is distributed as follows: First, Second, and Third Groups,

a head teacher and two assistant teachers in each; Junior Primary, a head teacher and one assistant. There is an additional assistant teacher not regularly assigned to any group but familiar with all four, who either acts as substitute for teachers who are temporarily absent or secures needed observation or experimental data in any of the groups.

Members of the staff of the Iowa Child Welfare Research Station and the University contribute varying amounts of time to projects directly related to the laboratories, either as part of a regular program or when particularly consulted. Such contributions are made in mental testing, in anthropometric measurements, in dental examinations, and in clinical advice in regard to behavior, speech or nutritional problems, or sensory difficulties. In addition to the professional staff there are five persons giving whole or part-time services toward the operation of the physical plant.

Supervisor of the Laboratories

The supervisor, whose time is devoted partly to the preschool laboratories and partly to other departmental responsibilities, carries the administrative load of the laboratories. It is her function to plan for the laboratories and guide them, with appropriate consultation in major matters concerning policy and staff.

The following duties may be classed as administrative: recommendations for appointments to the staff of the preschool laboratories; planning for and aiding in the coordination and smooth operation of all phases of the laboratories, including the staff, the school, and the plant; outlining and recommending the budget for general operating expenditures; and overseeing the school enrollment in matters of admission and withdrawal.

This member of the staff is also responsible for supervising the educational program. The head teachers are quite independent in planning and carrying out the programs for their groups. However, the supervisor gives general advice in order to insure consistency of educational policy and specific advice

when she feels that suggestions would be helpful in maintaining good educational standards. It is the responsibility of the supervisor to further the attainment of sound educational objectives by a progressive and integrated program from group to group. Specific techniques and methods are not identical in all groups. Inasmuch, however, as the objectives are clear and the pragmatic test is frequently applied, this very fact seems wholesome in a field in which experimental evidence is generally lacking and where different individuals may accomplish the same ends by different means.

Supervisory duties in connection with registration, with parent contacts, with special problems of individual children, and with educational research are discussed elsewhere. The training of teacher and students in preschool education is coordinated under the direction of the supervisor. The supervisor facilitates smooth coordination between preschool education and the research projects carried on in the school. Thus, she provides regulations controlling experimentation and, at the same time, helps to provide a flexible program which will make the children available for research.

From time to time she confers with parents in regard to matters of an administrative nature or instances of preschool policy. Information obtained from research concerning the child is customarily given to the parent by the administrative supervisor directly, or arrangements are made by her for giving it to the parent through another staff member.

The Teachers

The head teacher, as the name suggests, is directly responsible for the welfare and progress of each group, although the assistant teachers cooperate both in planning and in directing the program. She makes final decisions with regard to any matters that affect the group. She sees that all activities run smoothly, adjusting to all exigencies. The policies and procedures to be used in guiding the children and the provisions made for their welfare are discussed elsewhere. It is

the head teacher's duty to insure the execution of these policies, procedures, and provisions in a consistent and effective program.

Conferences are arranged with the parents throughout the year as the need arises, so that they may receive reports of the children's development and any suggestions which seem advisable. In the case of behavior problems, the teacher keeps in more frequent contact with the parent and, if necessary, refers that parent to the supervisor. She also has conferences with the specialist concerning the problem. She holds at least one conference each semester with every mother and keeps a record of all such conferences.

Working under the supervision of each teacher are assistant teachers and students registered for practice teaching. The head teacher plans their activities in order to give them a variety of teaching opportunities and as many other experiences related to work with the group as possible. She observes their work and through frequent conferences aids them in their teaching. The supervisor and head teacher confer with each other in regard to the progress and problems of these teachers.

Staff meetings with assistant and practice teachers are held at regular intervals, at least once a week and sometimes oftener, for discussion of problems and procedures and to enable the head teacher to bring certain policies and Station projects to the attention of her assistants.

The head teacher is responsible for keeping the necessary records for her group. There are administrative records, records of parent conferences, records of each child's educational progress, and records concerning the educational progress of her group. Frequently the teachers cooperate in making records for a specific research study, such as making ratings, recording achievements in routines, or making observations of nature-study activities. The head teacher assists those engaged in research projects in any way possible and keeps the interplay between research projects and her group in smooth working order.

An inventory of the equipment of each group is kept up to date and checked once a year in May. At this time, the head teachers estimate their requirements for replacement and repair of equipment and other supplies needed for the following year. On the basis of these requirements the year's budget is planned. As many supplies as possible are purchased during the summer for the following school year. It is possible to order additional supplies or arrange for repairs as the need arises, at the beginning of each month.

The head teacher of First Group supervises the noon meal during the regular school year. During the summer session this supervision is in the hands of the head teacher of Second Group.

Although the duties of the assistant teacher, as far as school contacts with the children are concerned, are of the same type as those of the head teacher, the difference between the two lies in the degree of responsibility. An assistant teacher is not responsible for the group as a whole or for special problems arising with individual children, unless such duties have been assigned to her. Assistant teachers are encouraged to show initiative in regard to plans for the group or for individual children and are offered an opportunity to take responsibilities as soon as they are capable of doing so. The assistant teachers are not assigned regular conferences with parents. However, they do have opportunities to meet the parents informally.

The School Nurse

A graduate and registered nurse is on half-time appointment in the Station; she remains on duty from 8:45 to 10:45 and 11:45 to 1:45 daily. Her work involves daily inspection of each child in the first three groups before he joins his group for the day. She takes the responsibility of withholding from admittance at any time any child whom she considers to be a carrier of infection or not to be in the best of health. If she wishes, she may call upon a staff physician for corroboration. She also examines staff members and students who question

the advisability of their working with the children at any time. Since she keeps in daily touch by telephone with parents of absent children, she maintains health records concerning every child and notifies each teacher early in the day concerning absentees. It is her duty to take all necessary steps of a precautionary nature to prevent transmission of contagious diseases. She is on call, while on duty, for taking care of situations requiring medical attention. Such would be cases demanding first aid or instances of the appearance of illness subsequent to morning inspection.

The Dietitian

The dietitian, on duty from 11:00 to 3:00, is in charge of the noon meal for those children who have luncheon at school. She plans the menus, orders the food, supervises the cook, and takes care of the accounts. She confers regularly with the teachers who eat with the children. She holds conferences concerning dietary matters with the parents whenever they wish them or whenever she thinks it advisable. For special aid in regard to nutritional problems the professor of nutrition is consulted.

Preschool Secretary

The secretary devotes full time to duties connected with the school. The management of details in connection with preschool registration is in her charge. She schedules appointments with parents, notifying staff members of these. After enrollment lists are completed, the collecting of tuition fees and school fees is her responsibility.

In addition to handling correspondence, she receives and files applications for preschool enrollment. Since records in regard to the preschool laboratories and the preschool children are kept in her office, she takes the responsibility for preparing necessary blanks and seeing that these are returned, properly filled out.

Activities Related to the Educational Program

Inasmuch as she makes out requisitions for preschool expenditures, she maintains the bookkeeping necessary to the handling of the preschool budget.

She assigns testing rooms to experimenters.

Observation in the Laboratories

Research workers, students, and parents as well as visitors who are professionally or casually interested constitute a group of observers who are present so often and so continuously that they are looked upon as a regular part of the program. Although resident observers receive training and instructions concerning the art of being unobtrusive observers and, as a result, are usually no more conspicuous than necessary, the limitations of space require certain restrictions. Anyone engaging in observation in the laboratories, therefore, knows that he is free to observe at any time unless the head teacher tells him that the limit of observers has been reached before his arrival. Her decision will be based upon the type of children's activity, the specific needs of the observer, the size of the room, the fatigue of the children, and any other pertinent facts.

Although small one-way screens are available in all groups, they are used mainly by parents who need to see their children without the children's knowledge. For purposes of student observation it is desirable to be closer to the children, and, in the case of some observational data for research, proximity is essential. Therefore, the children become accustomed to the presence of adults and, since every precaution is taken for the observer to watch as indirectly and apparently unpurposefully as possible, observers constitute a part of the background. The length of the observation depends upon the study of which it is a part. When an observer is confining his study to one child, he so indicates on the experimenter's record blank in order to insure against the child's being taken from the group by another experimenter.

In the case of student observations as a part of class work, arrangements are customarily made between the instructor

and the head teachers. It is then possible to arrange appropriate times for observing specific activities and to assure proper instruction and preparation of observers. Classes do not come as a whole, but students are urged to come individually in the hope that chance arrangement will secure a wider distribution as to time and place.

During the course of a year a large number of interested visitors go through the laboratories. These are either conducted through the preschools by some member of the staff or are given visitors' permit cards. Usually each year brings several large groups of students from other institutions who wish to learn about the laboratories in a day's visit. These groups are divided into smaller units who are conducted simultaneously through the laboratories so that not more than one group will be in a building at one time.

Parents of the children in preschool are the only persons who do not need permission to observe, for it is hoped that they will feel free to visit at any time. They understand, however, that if they arrive when observational possibilities are not promising, they may be asked to come at another time; for this reason it is suggested that they telephone before starting to the laboratories.

Records[1]

Records in connection with the preschool laboratories are regularly filed in the office of the preschool secretary. In part, they are designed to aid the teacher in maintaining her educational program; these are records of individual children, records of an entire group, and records concerning school activities. Other records pertain to matters of administrative concern, such as attendance, enrollment, experimental work, and equipment.

A large number of other records are kept in connection with research projects. These are available for the study of the individual children in school at any given time but, since

[1] In the Appendix (p. 306) may be found copies of the record blanks, together with brief descriptions of their use.

their nature varies with the particular study in question, they are not indicated here.

Laboratories for Research

Research is an integral function of the preschool laboratories. The children serve as subjects in a wide variety of studies. The educational programs reflect the experimental approach not only in the attempt to maintain a research point of view toward the problems and practices of preschool education, but also in the fact that reasonable adjustments for research needs are taken as a matter of course.

The program of research which is related to the laboratories, either because of the children involved or because of subject matter, consists of (1) long-time studies of children, started when they entered the laboratories and carried on routinely, (2) projects reflecting the specific research interests of staff members and carried on over considerable periods of time, and (3) problems of an individual and somewhat temporary nature. The last mentioned are decidedly in the minority and will not be discussed here.

In order to convey an idea of the types of problems undertaken, a representative sampling of studies contemporary with the publication of this volume may be cited.

Throughout the year anthropometric measurements are made of the physical growth of all preschool children. The primary purposes of these measures are to study the physical growth of the child, to develop standards of physical and nutritional status, and to evaluate techniques of measurement.

In cooperation with certain members of the staff of the dental college, examinations are made yearly of the condition of each child's teeth. Part of the children are serving in a study of ten years' successive observation by the X-ray method of the development of two teeth. Other joint researches linking growth studies with those in nutrition and dentistry are in progress.

Through experimental observations of the common motor skills of preschool children, a scale of motor achievements in these activities is being developed.

Each year the children in the laboratories are given two examinations as measures of general intelligence, one in October or November and one in April or May. This program of testing is intended to serve three main purposes: (1) the evaluation of existing tests in terms of consistency through the preschool ages and predictive value of later intelligence, (2) the development of criteria for adequate tests of intellect, and (3) the provision of a test score of mental development for use by research workers on other problems.

Other aspects of intellectual development are being approached through research. An information test suitable for ages two through six is in the course of preparation and standardization. Under the general subject of possible factors influencing the child's intellectual development are a study of teacher-child contacts, with special reference to their association with improvement in intelligence, a study of the relation of certain mental functions to changes in intelligence, and a study of the effect of enriched educational experience upon the growth of intelligence of very superior preschool children.

In the field of language development, studies are being conducted toward the formulation of a scale which will include such aspects of the child's language development as his enunciation, word organization, grammatical construction, and vocabulary.

Several groups of studies are classifiable under the general heading of emotional aspects of development. One group is concerned primarily with the conditions and effects of emotions and links the problems of development with the general theory of behavior and motivation. For example, one study is concerned with the effect of frustration upon the creative abilities of preschool children. A second group is approaching the study of certain physical manifestations in relation to emotions, a representative study being an investigation of certain changes in muscular tensions accompanying fatigue. Still a third group is made up of studies directed (1) toward an analysis of specified types of behavior and (2) toward an experimental attempt to modify this behavior. At present

ascendant behavior and reactions to failure are being studied from this angle.

Many of the above-mentioned studies will have direct or indirect implications for preschool education. However, there are additional studies in this field which are directed toward (1) more objective measures of estimating developmental levels in behavior which are of significance educationally, (2) the study of means of modifying specific types of behavior, (3) the study of the efficacy of certain specific attempts at modification. Following are listed contemporary studies classifiable in these categories.

A longitudinal comparative study of nursery-school and non-nursery-school children

A program of general science for a preschool group of three-year-old children

The effect of training children to face difficult situations

The construction of an achievement scale of behavior in constructive activity at the preschool level

The effects of a midmorning rest period upon the behavior of nursery-school children

The construction of an achievement scale of behavior in regard to property and personal rights

Literature for two-year-old children

The effect of training upon the singing ability and musical interest of three-, four-, and five-year-old children

In an institution maintaining an active research program there is need for consideration of the welfare of the individual child and of the educational program. Safeguards consist in provisions of a general regulatory nature, in frequent adjustments made in the light of particular situations, and in the general attitude and understanding of the persons concerned with research and education. For example, the frequency and duration of an experiment are limited and the interruption of an engrossing activity is guarded against.

Of prime importance is the knowledge of the research worker concerning acceptable principles of child care and training, his understanding of children, and his ability to

work with them. Beyond these are needed a thorough acquaintance with the specific educational situation and with the actual children in attendance at the school. Through guidance of research workers in course work and experience and by means of regulations concerning observation and participation preceding experimental work in any laboratory, an attempt is made to maintain these standards.

Although on the surface there may seem to be an incompatibility between providing simultaneously for research and educational needs, it has been proved that with both programs in the hands of persons fully appreciative of the others' purposes, a joint program is possible. It is true that an experimenter needs to spend more time than otherwise because of making necessary adjustments and that some breaks in educational activities may be necessitated. In view, however, of the ultimate aim these seem well justified.

The Graduate Program in Teacher Training

Eight half-time assistantships in preschool education are held by young women who are working for the master's degree in preschool education. These students are selected for their previous promising work in the field, their suitable personality qualifications for work with young children and parents, their general cultural background, and their professional interest. At any given time there is no more than one student from any one undergraduate institution.

These assistantships extend over a period of two years, during which each student teaches half time and carries a half-time program of graduate study. Since the preschool groups have only half-day sessions, each student fully participates as a teacher. In the course of her appointment, she teaches one semester in each of the four groups and has two summers' experience as well.

The assistant teacher's work is directly supervised by the head teacher of the group in which she is teaching so that her training in teaching grows both through practice and through being supervised. However, since she comes to this work

with previous training and good qualifications, she is equipped to teach actively and dependably and is looked upon as one of the teachers rather than as only a student. With the head teacher and the other assistant in the group, she takes part in all conferences and arrangements having to do with the conducting of that group.

The courses taken toward the degree are mainly in child development and allied fields and depend upon the needs of the individual student. The aim for each student is a varied experience especially in the following fields: child development and behavior, parent education, nutrition, elementary education, measurements, and research. Courses or their equivalent required of those working for the degree are: (1) psychology of childhood, (2) experimental psychology of childhood, (3) child study and parent education, (4) problems in preschool education, (5) advanced preschool education, (6) statistics, (7) elementary nutrition, (8) speech problems of the preschool child, and (9) research. Courses listed as highly desirable, all of which cannot be taken by any one student within the two-year period, are: (1) applied anthropometry, (2) mental hygiene of the school child, (3) educational psychology, (4) introduction to elementary education, and (5) intelligence testing.

Each student completes a master's thesis, the problem of which has a bearing on preschool education.

Other students not on appointment carry the same type of program. They do practice teaching in the laboratories, for which they receive course credit.

Students working for the doctor's degree who are primarily interested in preschool education major in the field of child psychology. They receive a training in preschool education which as a minimum equals that required for the master's degree in preschool education and write a thesis in the field of preschool education.

Appendix

Art in the Junior Primary[1]

JUNIOR PRIMARY ART OBJECTIVES

Type of Lesson	*Specific Objectives*
Illustration	To encourage graphic expression of ideas, stories, and experiences
	To develop habit of forming clear mental pictures
	To stimulate imagination
	To develop a sense of organization of principal interest with subordinate interests
Observation	To encourage observation of form, line, and color
Line Stories	To develop muscle control and quality of line
	To encourage definite purpose in work
Clay Modeling, Free Expression	To acquaint children with the handling of clay
Modeling from Memory	To develop habit of observation and memory
Drawing from Memory	To encourage thoughtful observation
	To encourage retention of mental images after observation
Drawing from Observation	To develop habit of judging form, line, and color
	To develop ability to represent in drawing what has been observed
	To encourage self-criticism
Color	To distinguish one color from another
	To recognize the five principal hues (Munsell theory)
	To recognize the five intermediate hues
	To learn how to mix principals together to make an intermediate
	To encourage a love of color and desire to use it
Design	To become aware of orderly arrangement
	To understand the principle of repetition and alternation in repetition

[1] This section has been prepared by Professor Edna Patzig, head of the art department in the University elementary school and in charge of the art program in Junior Primary.

University Elementary School Course of Study in Art Education

(Junior Primary)

Amount of Time:

2 periods per week plus free-activity periods in grade room
30 minutes in each period

General Objectives:

To satisfy the desire in children to create and express individual ideas and experiences through drawing, painting, and modeling

To stimulate observation and develop ability to express the appearance of things in the environment through drawing and modeling

To stimulate emotional and mental response to beauty which will lead toward discriminating taste and greater enjoyment and appreciation of nature and art

Introductory Remarks:

The material included in the following course of study is purposely left in flexible suggestive form so that the art program may be integrated with the projects of the grade room whenever a need for art activity arises or whenever the experiences or stories offer stimulating material for graphic or plastic expression. Suggestions are listed under different types of lessons because all these experiences are important for the development of art ability. Lessons should be chosen from the different groups to give an interesting and varied program. A happy atmosphere free from tension and fear should exist in the art period in order to facilitate free and joyous expression. Children should be carefully guided by directing their observations so that they themselves may discover truths, by encouraging self-criticism through reasonable questions, by stimulating the exercise of judgment and discrimination, and by showing principles which may apply in many situations. They should be helped to organize their thoughts in order to make their expressions more understandable or more beautiful, but the expressions whether they be representation of form observed or the formation of design must be entirely their own. They should be encouraged in creative thinking, and their minds should not be closed to indi-

vidual observation by their being allowed to copy what someone else has thought out or to follow detailed directions in order to secure a finished result.

Types of Work:

Illustration, Creative Expression. Children are encouraged to draw their experiences and illustrate stories. Questions and discussions should stimulate those who have nothing to express. They should be free to make their own expressions joyously unhampered by many instructions and criticisms from the teacher. When their drawings are completed, these should be discussed in a helpful, encouraging manner so that they may be led to observe forms and use reason and judgment in arranging forms in order to tell the story better. These illustrations should be made the basis for lessons in observing and representing forms they wish to use.

Observation Lessons. A few lessons in observation without materials will help to form a habit of looking at objects. Children are inclined to become absorbed in the use of materials if their interest is not directed toward observation. Large objects of interest to the child may be shown and questions asked regarding important proportions, direction of lines, color, etc. Children may indicate in the air with their hands the size and shape of simple objects or the direction of lines in certain objects.

Line Stories. To encourage clear thinking and develop muscle control and quality of line, a few lessons may be given in drawing line stories. Simple stories which show definite direction may be dramatized.[1]

Clay Modeling. Children should first be allowed to manipulate the clay and make anything they wish in order to get acquainted with its possibilities as a medium of expression. This medium has many advantages. Children work with actual form in three dimensions. They may obtain results quickly. The plastic material permits changes and corrections, thereby giving them the opportunity to take advantage of suggestions and develop in each lesson.

Drawing. Different approaches should be made to induce children to be observing, to understand what they see, and to make thoughtful expression of their observations. After expressing their ideas freely in illustrations, their drawings may be put up where

[1] See Woodbury and Perkins, *The Art of Seeing*, p. 62.

OUTLINE OF WORK

Type of Lesson	Procedure	Approximate Number of Lessons	Lesson Suggestions	Materials
Illustration	Arouse desire to create through class discussion of interesting subject matter Choose simple dramatic material Help children to get clear mental pictures Show work of previous illustration lessons, emphasizing good points, such as telling the story clearly, size and placing of figures, relation of parts to each other, action, and color Guide children to emphasize the main idea Lead them to understand the reason for form, proportion, and arrangement Encourage them to get helpful firsthand information by looking at objects, going to the window to see that the sky color continues to the horizon, to observe the shapes of trees, etc.	15	Suggested subjects What I saw on my way to school What I want to be when I grow up What my daddy does Raking leaves Playing in the snow Coasting On the playground A picnic Easter hunting for eggs Halloween The station with train The grocery store (This is a project used for Jr. P.) The home or house (Jr. P. builds and furnishes house) The postman The deliveryman Nursery rhymes Tortoise and the hare *Old Mother Hubbard* Story of the gingerbread man *The Three Bears*	Crayon Unprinted newspaper Chalk, colored
Observation	Arouse interest in appearance of things in surroundings Have children indicate line direction with hands—vertical, horizontal, slant Show shape of objects in air with hands	2	Objects for observation Line direction Broom, dustpan, hoe, rake, spade, box, book ends, tree trunk and branches, chair, table Study of shape Short and wide objects, bowl, pitcher, flat squash	

OUTLINE OF WORK—(*Continued*)

Type of Lesson	Procedure	Approximate Number of Lessons	Lesson Suggestions	Materials
			Narrow and tall objects, bottle, vase, milk bottle Circular objects, ball, balloon, orange, apple Triangular objects, gables on roofs	
Line Stories	Have children dramatize some activity or tell a story which may be expressed by direction lines Children draw lines showing the action or direction (Read Woodbury and Perkins, *The Art of Seeing*, p 62)	8	Suggested stories Playing ball Mouse and cheese Catching the falling apple Shooting target Children on slide Diving into pool Coming to school Fireman sliding down pole Climbing the ladder	Charcoal or crayon Full sheet, unprinted
Clay Modeling, Free Expression	Demonstrate ways of using clay Information on care of clay· pounding takes out moisture, breaking into bits wastes the clay Stimulate interest when necessary by questions as to what could be made of clay	8	Allow children to make whatever they wish	Clay Oilcloth covers on tables
Modeling from Observation	Interest class by asking questions about form of objects shown them Call attention to size At first it is well to use small objects so that each one will have enough clay to make it actual size Have children compare	12	Objects of definite simple shape—orange, ball, cucumber, carrot Objects which are similar in shape—apple and pear, banana and carrot, almond, pecan, and Brazil nuts, bars of soap Objects of interest—duck, fish, turtle, dog	Clay Celluloid models of ducks, fish, etc simple toy animals

OUTLINE OF WORK —(*Continued*)

Type of Lesson	Procedure	Approximate Number of Lessons	Lesson Suggestions	Materials
	objects similar in shape and notice the differences Ask them to model so all may recognize which thing they are modeling		lying down, rolling pin, salt and pepper shakers Turtle may be used for paperweight for Christmas present by painting and shellacking after it is dry Vase and candle holders to be used in playhouse When working on store project, they may model fruits and vegetables which may be painted and used in their store	
Modeling from Memory	Show object Arouse interest by questions, call attention to definite parts, then hide object and let class work from memory	5	Similar to above	Clay
Drawing from Memory	After children have discovered from looking at their illustrations that certain forms cannot be recognized easily, show them the form and ask questions to direct their attention to the structure Perhaps they have drawn children with no shoulders or with misplaced arms By looking at some child from the class they may be led to see what children can do with their arms and why they are as long as they are They should draw from memory using information gained	11	Suggested objects Models of birds, ducks, chickens Dolls Child from class Simple toy animals Children's pets Dustpan, broom, train, automobile, airplane, etc.	Manilla paper 9 by 12 in. Unprinted newspaper Crayons or easel paint

OUTLINE OF WORK —(*Continued*)

Type of Lesson	Procedure	Approximate Number of Lessons	Lesson Suggestions	Materials
	from observation Have some child in class dramatize some activity from a story; children draw from memory after observing and discussing. Have children draw some familiar form, such as a bird, from memory. Then show them a model, discussing with them points they had not remembered. They should draw from memory following this observation Lead children to discuss the shape and proportions of interesting toy or other subject placed before them. Hide the object and have children draw from memory			
Drawing from Observation	Bring before class objects which have given them trouble in their illustrations or any simple objects interesting to the children Ask questions about size, shape, and proportion Sometimes aid them in planning size and general proportions by making large sketch before class showing the way to draw general size and shape, then blocking in divisions before drawing details	11	Objects for study. Simple dolls Toy animals Toy train Airplane Automobile Gingerbread man Jack-o'-lantern Teddy bear Christmas presents Any objects from the room which are of interest and definite and simple in shape	Manila paper, 9 by 12 in. Half sheet unprinted newspaper Crayons

OUTLINE OF WORK—(*Continued*)

Type of Lesson	Procedure	Approximate Number of Lessons	Lesson Suggestions	Materials
Color	Play games naming and matching objects of same hue Place many objects about room, have children select all the red ones and place in group, do this with the five principal hues Play game naming things we eat or use that are red, that are yellow, etc. With crayon mix two principal hues to form an intermediate	3	Using squared paper, color alternate squares with different principal hues, fill in squares with intermediates, mixing the two principal hues Make rainbows Make bands or borders of color	Manila paper Squared paper Crayons
Design	Point out examples of design in clothing, objects in room and home With squares and circles of colored paper, show unorganized arrangement and orderly arrangement Have children make surface designs using simple abstract motifs on squared paper Demonstrate how they may make design more interesting by alternating the space or the unit Demonstrate borders, using simple geometric shapes arranged in simple sequence, then in alternation to add variety Have children make original surface and border designs for any need that arises	6	Design on Halloween plate doily, pumpkin in each corner of square Border designs for curtains in playhouse Border design for table runner in playhouse Valentine; heart may be cut out of folded square paper to be mounted on inside of folder, which is decorated on outside with original surface design Design on May basket	Squared paper Crayons

all may see whether or not the stories have been well told. When they can see that their forms are not intelligible to others, they may be led to observe these forms, to make certain decisions about the proportions, and show these truths in their drawings. At first it will be well to discuss with them certain facts about the appearance of the form placed before them, asking questions so that they must make all decisions, and then have them draw from memory. Sometimes they should be asked to draw something with which they are very familiar but which is not immediately before them. The attempt to draw the form will reveal hazy mental pictures and encourage them to inquire into the appearance of things. Frequently they should draw directly from observation, being led by the teacher to think of size and largest proportions first.

Color. A love for color should be stimulated by contact with good color arrangements and by experiences in using color in illustration drawing and design. Children should be taught to recognize the five principal hues of the Munsell color system: red, yellow, green, blue, and purple. They may learn to produce the intermediate hues by mixing two of the principal hues.

Design. Orderly arrangement may be demonstrated by placing books on a shelf, blocks on the floor, or squares of colored paper on a white paper. Children may find surface designs on their dresses, on floor coverings, dishes, and other places. The teacher may demonstrate the making of surface patterns by repeating the same unit at regular intervals on squared paper. After being shown many simple abstract units used in designs, children may make their own designs. They may be shown how they can make their designs more interesting by alternating the position or the unit. Later they may be shown repetition in borders and should see many examples of borders on dishes, dresses, towels, and other familiar objects. Children should make original designs whenever a need arises in connection with projects of building a playhouse, making doilies, May baskets, valentines, etc.

Music in the Junior Primary[1]

Music activities occur at a stated time each day and periods are approximately twenty minutes long. In the time allowed for observation and instruction, the teacher studies each child's abilities and his reactions to different types of music and musical activities in order that she may select materials and plan experiences adapted to the interests and needs of individuals and the group. Although, in actual teaching, singing and listening activities occur throughout each period, for purposes of clarity they are separated in this descriptive account.

The children are given frequent opportunity to hear and to sing songs of good musical quality appropriate to their interests and needs. In selecting these, consideration is given to length and range of song, kind and arrangement of intervals, repetition and contrast of phrases, and words. Songs selected for children to sing are generally short but not to the degree that they lack musical meaning. Longer songs that contain simple phrases or combinations of tones which children may reproduce easily are also used. The songs may be constructed both on chordal lines or in skips, and diatonically or scalewise. Some emphasize ascending groups of tones, others descending. Some stress a certain type of interval (such as descending fourths or ascending thirds), others employ scale passages almost exclusively. But as a rule, most melodies contain a variety of simple tonal patterns. It is difficult to state authentically that any one type is the easiest.

[1] This section has been prepared by Professor Anne E Pierce, head of the music department in the University elementary school and in charge of the music program in the Junior Primary group

A few melodies contain only two phrases, many have four phrases, and some have six. Generally there is a repetition within the piece; that is, the first and third phrases and the second and fourth are often identical or are similar in character. The teacher, therefore, in selecting the songs tries to consider variety, individual differences among the children, and the reaction of the children to the songs.

Much of the material is of folk type. Some songs have temporary value, all are of permanent worth. As a rule the range of music does not exceed the octave *d* to *d'*, although some songs contain notes a degree or so higher or lower. However, it has been found that songs with restricted compass lying in the medium part of the voice are more effective than those that employ very high or very low tones. The teacher bears in mind individual differences in this respect and transposes a song when she deems it necessary or chooses another composition employing different pitches.

The words to the songs are simple, yet not trivial, and generally express experiences of children of this age. It is not unusual, however, to have children ask to hear and sing such songs as *Old Black Joe*, *Old Folks at Home*, *Blue Bells of Scotland*, and *Flow Gently, Sweet Afton*, which have words somewhat beyond the children's level but have a real appeal musically.

In presenting songs to children, the teacher to the best of her ability renders every selection in a musical and artistic way. She tries to use a light, easily produced tone true to pitch and of pleasant quality and to pronounce the words distinctly and accurately, In brief, she attempts to render the song as she wishes the children to sing it. If an accompaniment is used, it is played with careful attention to musical effects.

Generally, a song is taught to the children in its entirety. However, sometimes it seems advisable, because of vocal difficulties, to treat a single phrase as a separate unit. Immediately following this "detaching" method this phrase is then connected with the others and the entire song is sung again.

Usually, if properly selected and presented, a song does not need outside information or agencies to arouse interest. However, various devices add variety and have been used effectively. Sometimes stories about songs are told to the children and appropriate pictures are used. Often the teacher correlates or integrates songs with other school activities. That is, a song about the Gingerbread Boy may be introduced when children are making ginger-boy cookies, or postman songs may be sung when the postal service is being studied. At times children and teacher discuss words and mood of the song. Dramatization or rhythmical movements in agreement with words and music are used occasionally to serve as a play or recreational activity and to stimulate sensitiveness to rhythm. To serve a like purpose, simple singing games, such as *Looby Loo, Muffin Man,* and *Round and Round the Village* are introduced.

During the first presentation of a song, the teacher does not ask, or expect, the children to sing, although after hearing a melody a few times they are encouraged to do so, particularly in the easiest parts. For instance, in a song about a clock, the children may sing the "tick, tock," or in the song *The Pony* they may reproduce the phrase "Hop, hop, hop." Throughout the year much time is devoted to individual performance, but, as children gain experience and skill, ensemble singing becomes more and more common.

In the early vocal responses of the children, the teacher discovers varying aptitudes and traits. After observing individual characteristics and differences, she classifies the children into three groups: (1) those who reproduce accurately a simple melody, called "independent" singers; (2) those who sing simple phrases or intervals with the help of the teacher, other pupils, or the piano, designated "dependent" singers; (3) those who cannot match tones and have difficulty in inflecting the voice, termed "nonsingers." The teacher then seeks the reason for lack of singing ability. In most cases, the causes seem to be lack of musical and singing experience, inattentiveness to pitch, and, to a lesser degree, incorrect use

of voice. The tone-deaf child has not been found in any five-year-old group under observation. After careful study, the teacher plans work to correct the faults.

To help the average nonsinger, an interest in listening to songs sung well by pupils or teacher and to instrumental compositions played on the phonograph, piano, and other instruments is thought to be helpful. Rhythmical activities and tone drills and plays are also employed. In all tone exercises, the teacher discovers the pitch the problem singer imitates most readily and then works from it to others. Short exercises using various intervals diatonically and chordally arranged, are useful devices. Drill is given individually and at brief but frequent intervals. The work is carefully presented so as to put the singer at ease. Among tonal exercises found helpful are:

1. The teacher speaks phrase of song, then sings it to show difference in sound and manner of producing voice. The child is asked to do the same.
2. Visual aids are employed, such as a child's moving his hand up and down when singing rising and falling intervals.
3. Child finds tones in a singing range on an appropriate instrument and tries to reproduce them.
4. Child walks with the teacher when singing and tries to make his voice "walk" too.
5. Games such as "Echo" where the child answers the teacher or other children
6. Imitation of sounds of animals, birds, street venders, bells, etc.
7. Singing tones or simple intervals as they appear in songs

Remedial work in voice is not confined to children who are unable to "carry a tune." Efforts are made to overcome incorrect breathing, poor posture, and wrong formation of vowels and consonants. For example, if articulation is indistinct because of inflexible tongue and lips, songs and exercises containing the consonants *t*, *d*, *n*, *m*, *p*, *b*, *f*, and *v* are used. Loud, raucous tones are avoided, as is hushed, suppressed singing. In all vocal work the teacher constantly

encourages in the young child a voice that is freely produced and pleasing in quality with clear, distinct enunciation and articulation. She tries to have the children maintain good posture and does not allow them to remain in one position so long that they become fatigued. She provides a variety of music in the hope that the singing period will be a valuable and joyous experience.

Through the mediums of the teacher's voice, the phonograph, piano, and other instruments such as violin, cello, clarinet, and flute, brought in by visiting performers, children have many occasions to hear music. Early in the year such opportunities are given in connection with other phases of music work, but later the entire music period is sometimes spent in listening quietly to compositions.

The music selected includes a variety of styles and moods. As with music used for singing, the length of a composition and its melody, harmony, and rhythm are qualities considered. Standard compositions by such composers as Mozart, Schumann, Mendelssohn, Grieg, and MacDowell form the basic material, and, as in other units of work, a progressive development is kept in mind.

Songs presented by the teacher are used for first lessons in quiet listening. These include songs expressing child interests and experiences and songs having words of literary worth; the latter often are those listed as favorite poems by children. In presenting instrumental compositions, the teacher sometimes tells a correlative story such as, for example, the tale about the tailor and the bear, before she plays the composition *The Tailor and the Bear* by MacDowell; or *The Ugly Duckling* may be read in connection with *The Swan* by Saint-Saëns. Often the teacher merely names the descriptive title of a piece; at times she shows a picture to illustrate the mood. Occasionally brief remarks are made about the type of music to be performed. Frequently the music is played without comments of any kind.

In the listening lessons, certain information of a factual and appreciational nature is given. For example, stories about

the life of Mozart or the boyhood of Mendelssohn or Schumann are told in connection with their music. Through use of pictures and actual demonstration of instruments, children are instructed about the violin, cello, flute, clarinet, bells, harp, trumpet, drums, and piano. They learn to recognize them by sight and sound and they observe how the instruments are played. They discover the difference between the band and the orchestra, and they know the function and duties of the conductor. Such words as *high*, *low*, *loud*, *soft*, *fast*, *slow*, *happy*, *sad*, *restful*, *quiet*, and *gay* used in connection with songs are similarly applied to instrumental compositions. Through hearing, children learn to recognize and discriminate simple musical forms, such as *march*, *dance*, and *lullaby*. Words, such as *phrase*, *baton*, *accompaniment*, *introduction*, and *interlude* are used at appropriate times and become a part of the child's musical vocabulary. However, little emphasis is placed on imparting facts, the main purpose of the lessons being to give children pleasurable contact with good music.

Record Blanks in the Preschool Laboratories

APPLICATION FOR ATTENDANCE IN PRESCHOOL LABORATORIES[1]

Iowa Child Welfare Research Station

STATE UNIVERSITY OF IOWA, IOWA CITY, IOWA

Child_____ Sex_____ Date of computation_____
Year Month Day

Date of birth_____
Year Month Day

Parent_____ Occupation_____ Age of child_____
Years Months Days

Iowa City address_____ Tel _____ Home address_____

Date to enter_____

Date of application_____

Application recorded by_____

In emergency, call· Name_____ Address_____ Tel._____
In medical emergency call:

(1) Dr._____ Address_____ Tel._____

[1] Filled out by preschool secretary at time of application and thereafter.

(2) Dr._____ Address_____ Tel._____

Reason child did not enter_____

TELEPHONE CALLS

Date	Staff member	Subject of conversation

CORRESPONDENCE

Date	Staff member	Subject of correspondence

Form 2–August, 1931

ENROLLMENT RECORD[1]

Preschool Laboratories, Iowa Child Welfare Research Station

Name of child_____ No _____
(Surname first)

Date of birth_____ Sex _____
Month Day Year

Name of parent_____
(Surname first)

Home address_____

Occupation: Father_____ Mother_____

Date of entrance_____

Attendance { Year_____ / Division_____

If dropped { Date_____ / Reason_____

Remarks_____

Date Address Telephone

[1] First filled out by preschool secretary at time of admittance and kept up to date thereafter.

Record Blanks in the Preschool Laboratories

Form 1
June, 1936

INITIAL INFORMATION BLANK[1]

Preschool Laboratories

IOWA CHILD WELFARE RESEARCH STATION
STATE UNIVERSITY OF IOWA
IOWA CITY, IOWA

Data obtained prior to day of registration:

1. Name_____ Nickname_____ Sex_____

2. Date of birth_____ Age (Yrs, Mos, Days)_____

3. Address_____ Home phone_____ Business phone_____

To be filled out by parent during registration.

1. Previous school attendance_____
2. Transportation· Taxi, automobile, walk (Underline)

3 Who will accompany child?_____

4. If child walks alone, what streets does he cross?_____

5 Mother

a. Maiden name_____ Date of birth_____

b. Birthplace_____

c. Education: Grammar school, high school, college (No. of years in college _____), degree_____

d. Occupation before marriage_____

e. Do you do any work outside your home?_____ What work?_____

f. Hours_____

g. Was either of child's maternal grandparents born outside of United States?

h. If so, where?_____

[1] Filled out in part by child's mother and in part by teacher at time of first conference at registration. (A new blank is filled out with exception of data concerning parents for each year of child's attendance.)

6 Father

a. Name_____ Date of birth_____

b. Birthplace_____

c. Education. Grammar school, high school, college (No. of years in college _____), degree_____

d. Occupation_____

e Was either of child's paternal grandparents born outside of United States?

f If so, where?_____

7. Brothers and sisters (List even if not living and give date of death)

Names	*Date of Birth*

8. Who are the members of your present household? (Include parents, children, other relatives, roomers, maids, etc)

9. Do you live in an apartment?_____ In rooms?_____ Do you occupy a whole house?_____

10. Does the child have a room of his own?_____

11. How much play space does he have?_____

12. How much of his time at home does your child stay out of doors?_____

13. What are the ages and sexes of the children with whom your child has played regularly during the last year?

14 What type of play do they engage in and how does your child get along with others?

15 Where was your child born?_____

16. Where has your child lived since he was born and for how long?

17 Condition of general health so far as you know_____

18. What contagious diseases has your child had?_____

19. What serious illness, if any, has your child had?_____

*To be filled out by teacher at time of conference with parent:*_____

Teacher's name

Record Blanks in the Preschool Laboratories

1. Toilet habits_____

2. Sleep and nap habits_____

3. Eating habits and difficulties_____

4. Language development_____

5. Fears_____

6. Behavior habits (biting nails, finger sucking, tantrums, biting, etc.)_____

7. Discipline_____

8. What experience has child had away from parents and how does he act when left by parents?_____

9. Any other information or problems which parents think teacher should know

10. Family doctor

First choice:_____ Telephone_____

Second choice:_____ Telephone_____

Form 2
January, 1937

Sheet 1

DAILY HEALTH RECORD[1]

Preschool Laboratories

IOWA CHILD WELFARE RESEARCH STATION
STATE UNIVERSITY OF IOWA

Name_____ Sex_____ Group_____ Recorded by_____

Date of birth_____ Date of this record_____

Any unusual experiences in the child's past, any family weakness or characteristics relating to health or disease, or any present weakness in the child which should be taken into consideration by the school in working with him:_____

Allergies	Their manifestation	Who diagnosed the condition

Dental report

Inoculations: Give date and evidence of effect

Contagious diseases and exposure

Date	Height	Weight

[1] First page filled out by nurse at beginning of year and thereafter upon appropriate occasion. Successive height and weight measurements are recorded.

Second and subsequent pages give a continuous daily report on the child's health.

Form 2
January, 1937

Sheet 2

DAILY HEALTH RECORD

Preschool Laboratories

IOWA CHILD WELFARE RESEARCH STATION
STATE UNIVERSITY OF IOWA

Name_____ Date_____ Recorded by_____

Nose Throat Skin Eyes Ears Digestion Elimination
Cough Reports of any medical examinations or consultations

Date	Child's Condition

December, 1937

RECORD OF EDUCATIONAL PROGRESS[1]

Iowa Child Welfare Research Station

STATE UNIVERSITY OF IOWA, IOWA CITY, IOWA

Child's name_____ Teacher_____

Group_____ Date_____

I. PHYSICAL

A. *Medical*

1. Physician's recommendations for school
2. Conditions needing consideration in school environment
3. Dentist's recommendations
4. Successive height and weight measurements
5. Child's cooperation in dental, medical and physical examinations

B. *Routine health habits*

1. Cooperation in mid-morning lunch and noon meal
 (Time, likes or dislikes, means of avoiding disliked foods, amount of responsibility taken by child, methods used by teacher)
2. Desire for water
3. Rest
 a. Mid-morning rest (Amount of time before relaxation, amount of rest gained, degree of relaxation)
 b. Afternoon nap (Amount of time before relaxation, amount of rest gained, degree of relaxation)
 c Resistance to fatigue
4. Elimination (Regularity, self-control, self-help)
5. Responsibility for health
 a. Habits of cleanliness (Wiping nose, keeping hands and objects out of mouth, touching mouth and nose to things, washing hands at appropriate times, etc)
 b. Awareness of common precautionary measures (Temperature, dampness, dress, physical hazards)
 c. Awareness of contagion as a fact

C. *Motor development and coordination*

1. Progressive development of motor control and skill in co-ordination (poor, average, good, in terms of average child of his age)
2. General summary

Indoor activities	Ease of movement
Outdoor activities	Vigorousness
Manual dexterity	Enjoyment
Rhythmic responses (motor aspect only)	Variety

[1] One record filled out completely by head teacher for each child once a semester, following two weeks' special observation of this child by staff (In writing the report, this outline is followed.)

3. Ability to take responsibility for oneself in routine activities
 a Dressing (present stage and evidence of progress)
 b Undressing (present stage and evidence of progress)

D. *General appearance* (any outstanding characteristics)

II INTELLECTUAL DEVELOPMENT

A. *Intelligence quotient*_____Date_____C A._____M A _____

B. *Intellectual habits, attitudes, and characteristics*

1. Interest in world in which he is living and contacts with it (Thoughtful questions, alertness to change, investigativeness, interest in reliving experience)
2. Quickness and independence in perceiving relationships (Ability to solve problems, perceptions of causation, difference, similarity, superiority, etc.)
3. Independence in thought
4. Is action reasonably or emotionally controlled?
5. Persistence in directing thought (Attention, distractibility, suggestibility, interest in following through an idea of his own)
6. Background of information
7. Ability to profit by experience and by verbal explanations
8. Critical ability (Ability to recognize good ideas in others and to evaluate superior and inferior products and activities of others)
9. Ability to follow directions
10. Use of capacity in so far as he is able

C. *Language and speech*

1. Interest in learning and using new words
2. Quality of vocabulary
3. Grammatical construction
4. Ability to express himself clearly
 a. Discrimination in use of words
 b Ability to organize words
5. Ability to speak before a group
 a. Willingness to talk
 b. Interest for audience
 c. Poise; speaking to the point
6. Characteristic voice quality and intensity
7. Enunciation (Systematic mispronunciation of certain vowels or consonants)
8. Speech anomalies (Repetition, stuttering, etc These refer to the anomalies involved in talking, not mispronouncing.)

III. PERSONALITY DEVELOPMENT AND SOCIAL BEHAVIOR

A. *Characteristic emotional behavior*

1. Evidence of presence or absence of emotional tension
 a. Emotional behavior in extremes of degree or frequency (Anger, fear, affection)

b. Habits or behavior indicating emotional tension (Thumb-sucking, nail-biting, masturbation, scratching, biting, pushing, screaming, throwing, uncontrolled hugging, kicking, etc.)

2. Feelings toward others
 a. Does he show friendliness?
 b. Does he act generously?
 c. Does he ever exhibit jealousy?
 d. Is he ever sulky?
 e. Is he sympathetic?
 f. Is he ever cruel?
3. General tenor of emotional life
 a. Is he inclined to be moody?
 b. Does he seem to enjoy life?
 c. What is his "tempo"?

B. *Characteristic social behavior*
1. Under what circumstances and to what extent does he
 a. Let others participate?
 b. Contribute to ideas of the group?
 c. Participate in the group?
 d. Secure cooperation of others?
 e. Direct a group?
 f Accept appropriate individual and social responsibilities
2. Is he dependent upon social contacts for entertainment? Is he able to work or play alone and enjoy doing so? Does he show a desirable balance between sociability and social independence?
3. Contacts with adults
 a. Independent of adult in appropriate situations
 b. Dependent on adult in appropriate situations
 c. Is easy in contacts with adults (Not showing off, not defiant, not overdependent on affection or attention or approval, not withdrawn, not self-conscious, affection is open, natural, normal)
4. Situations involving personal and property rights of himself and others
 a. Distinguishing between his own and other's material
 b. Methods of defending his own justified rights
 c. Respecting rights of others

C. *Attitude toward reality*
1. Ability to criticize himself at appropriate times
2. Recognizing his own part in failure
3. Ability to accept failure as encouragement to further effort which, if unsuccessful, is faced effectively
4. Accepts success gracefully

D. *Personal Attributes*
1. Sense of humor (Readiness to see the funny and amusing side of things. *Not* frequency of laughter. The extent of likeness to adult humor)
2. Dependability
3. Genuineness
4. Wholesome outlook on life (Attitude toward self and others. Genuineness Enjoyment. Few fears)
5. Popularity in group

IV. AESTHETIC DEVELOPMENT

Does he have an outstandingly absorbing interest?
Even though he does not participate, does he show an awareness?
What interest does he show in new experiences as well as in continuing familiar favorites?
Does he ever engage in creative activity?
Does enjoyment characterize his attitude?

A. *Music*
1. Singing
a. Under what circumstances and to what extent does the child sing?
b. How well does he sing?
1. Does he know any songs which he sings alone?
2. Does he sing well with the group?
3. How is his voice characterized?
4. How quickly does he learn a song?
5. To what extent does he show readiness to try to sing new songs?
c. What are some of his favorite songs?
2. Rhythm
a. How accurate and varied are his rhythmic responses Type of activity; type of rhythm?
1. Length of series child can maintain without breaking rhythm
2. Does he accent the appropriate beat?
3. Does he have a general idea of tempo?
3. Listening
a. Under what circumstances and to what extent does he listen to music? As evidenced by.
1. Absorbed attention (including length of duration)
2 Evidence of remembering and having favorites
3. Apparent attention without suggestion
4. Apparent influence on simultaneous activity
5. Comments on music

B. *Literature· Stories, Poetry*
1. Under what circumstances and to what extent is he interested?
a. Initiation of activity
b. Types of activity
c. Does he have favorite types of literature?
d. Is any particular type of content especially interesting to him?
e. Space of attention
f. Is this activity mainly of an individual or group nature for him?
g. Does he show imagination?
h: What are some of his favorite books, stories, poems?

C. *Graphic and plastic art Painting and drawing, creative activities with blocks, modeling with clay, others*
1. Under what circumstances and to what extent is he interested? Does he evidence enjoyment?
a. Is his activity mainly manipulative, or does he evidence some other purpose? Is it representative?
b. Is he usually attending consistently to what he is doing?
c. Is he self-critical?

d Does he have varied and independent ideas?
e. What degree of skill in manipulation has he?
f Does he take satisfaction in completion (his own idea of completion)
g Does he enjoy experimenting?
h. Does he show imagination?
i What are some typical activities or products?
2 Has he developed an appreciative attitude toward the products of other children? Artists?

* * *

Form 1
1928

INTELLIGENCE TEST RECORD[1]

Iowa Child Welfare Research Station

Name_____ Sex_____ Index No _____
Surname First Middle

Parent_____ Date of Birth_____
Surname First Middle Month Day Year

KUHLMANN-BINET

Test No.	Form	Examiner (Surname)	Preschool Group	Grade	Date	CA	MA	IQ
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

[1] Record for card file. (Kuhlmann-Binet used for children three years and six months old and younger chronologically.)

Form 2
June, 1931

INTELLIGENCE TEST RECORD[1]

Iowa Child Welfare Research Station

Name_____ Sex_____ Index No _____
Surname First Middle

Parent_____ Date of Birth_____
Month Day Year

STANFORD-BINET

Test No.	Form	Examiner (Surname)	Preschool Group	Grade	Date	CA	MA	IQ
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

[1] Record for card file (Stanford-Binet used for children over three years and six months old chronologically).

REPORT TO PARENTS ON PHYSICAL MEASUREMENTS[1]

Iowa Child Welfare Research Station

UNIVERSITY OF IOWA, IOWA CITY

Date of measurement_____
Year Month Day

Child_____ Age of child when measured_____
Year Month Day

Purpose of physical measurement reports Reports on physical measurements are intended to provide parents with interesting, accurate, and helpful information about the physical development of their children.

Value of this report to parents The information furnished by this report may be of service in at least five different ways

(1) In giving a record of the actual size of your child at the age indicated above. This actual size is given not only for stature and weight, but also for circumference of chest, length of legs, and six other measurements.

(2) In showing how your child compares with other Iowa children of the same age. Comparison is shown for each of the ten measurements reported.

(3) In indicating the body build of your child at the age of this examination. There are wide individual differences in build. Note if your child tends to be above average in dimensions of the trunk but below average in leg length, or vice versa

(4) In giving information on the physical fitness of your child. For example, a child that is near the average in most bodily dimensions and yet is markedly below average in weight, arm and leg girth, or thickness of skin and underlying tissue (fat), should ordinarily be checked by a physician for disease conditions and by a nutritionist for additional dietary needs.

(5) In affording a means of watching the progress of your child's physical growth. By using this report in conjunction with similar reports obtained on your child at other ages, you can determine the amount of growth occurring in each dimension between one measurement date and the next. You can also follow any changes that occur in the child's build or in his standing with relation to other Iowa children.

Should you care to discuss this report with a member of the staff in physical growth, please arrange an appointment with Dr. Meredith (University Extension 621)

George D. Stoddard
Director

This report is sent to parents once a year or oftener if appropriate.
On the second page the child's actual measurements are given in the appropriate blanks at the left.

Record Blanks in the Preschool Laboratories

Form 1:
1937

Measurement	Lower Quarter	Middle 50 Per Cent[1]	Upper Quarter
		Average	
Weight: ____lb.			
Stature (Total Length)· ____in			
Leg Length: ____in.			
Shoulder Width· ____in.			
Hip Width: ____in			
Chest Girth: ____in.			
Girth of Arm: ____in.			
Girth of Leg: ____in			
Width of Knee Joint ____in.			
Skin and Underlying Tissue (Fat) Score: ____			

[1] The average measure for children of this child's age group is typed in for each measurement at the dotted line headed "average." Check marks are made along the horizontal lines to indicate this child's position with reference to the average.

RECORD OF NOON MEAL
Iowa Child Welfare Research Station
IOWA CITY, IOWA

Form 1
1937

Weight____Date measured____
Height____Date measured____

Name_____ Group_____ Week beginning_____ Recorded by_____

	Food	Time	General Behavior	Enjoyment	Dislike or Distaste	Method, Results, Recommendations
Monday						
Tuesday						
Wednesday						
Thursday						
Friday						

GENERAL DIRECTIONS FOR USING NOON MEAL RECORD

Iowa Child Welfare Research Station

IOWA CITY, IOWA

1 Each child has a day-by-day weekly record, to be recorded *after*, not during, the meal by the teacher supervising the table.

2. Food· List menu excepting milk and bread. Use abbreviations. Indicate any special individual adjustments or preparation of food

3. Eating Time Beginning time is the time the child sits down at the table ready to eat. He is finished when he is ready to clear his place

4. General Behavior Applies to meal as a whole and is descriptive of his behavior other than that covered in enjoyment and dislike of food Conversation, activity, restlessness, carelessness. Also includes degree of dexterity and independence in eating.

5. Enjoyment: Include here only the food which is eaten in such a way that real enjoyment is unquestionably evident—eats immediately, eats rapidly, asks for more, eats before everything else, with evidence of pleasure What food and how shown?

6. Evidence of Dislike or Distaste: What foods and how shown? Suggestive indicative behavior is: Does not eat, leaves until last, eats slowly, spits it out, expression is one of distaste, etc.

7. Teacher's Method and Results: How the teacher tries to modify the child's behavior, either in regard to eating or general behavior. Includes both direct and indirect methods and dining-room adjustments. Also includes teacher's estimate of success of her methods.

8. Recommendations: For following day or next time this food is served or for special serving In terms of food and techniques.

9. On back of sheet, teacher should record at the end of the week a brief summary statement of what she has discovered during the week concerning the child's eating behavior. Suggestive material would be: Food dislikes, food likes, improvement in behavior or attitudes, reasons for general behavior, most successful methods, need for parent conference.

Lack
Form 1
1937

WEEKLY NAP RECORD[1]

Iowa Child Welfare Research Station

STATE UNIVERSITY OF IOWA, IOWA CITY, IOWA

Week of_____ Teacher_____

Name	In Bed	Asleep	Awake	Wakened	Up	Total	In Bed	Asleep	Awake	Wakened	Up	Total	In Bed	Asleep	Awake	Wakened	Up	Total	In Bed	Asleep	Awake	Wakened	Up	Total	In Bed	Asleep	Awake	Wakened	Up	Total	Remarks

[1] Recorded by teachers in charge of sleeping room and kept posted on parents' bulletin board.

Record Blanks in the Preschool Laboratories

Form 1
March, 1937

TEACHER'S REPORT OF EDUCATIONAL PROGRAM[1]

Iowa Child Welfare Research Station
State University of Iowa
Iowa City, Iowa

Group: Date: Date last recorded: Teacher·

1 Physical, motor
2. Constructive activities
3 Nature studies
4. Social studies
5 Literature
6. Painting, clay
7. Music
8 Dramatic and imaginative play
9. Group control, teacher assignments, other teacher activities

Equipment—new to the group, in different form or arrangement:
Method of stimulating experience
Type of activity:
Suggestions for future·

[1] Notations made by teacher several times weekly, usually concerning only one activity at a time. (Each activity covered at least once every three weeks.)

IOWA CHILD WELFARE RESEARCH STATION[1]

Preschool Experiment Record

Every time a child is taken from the group for experimental purposes, the experimenter should note the exact time, with his initials, and upon returning the child, note the exact time of return immediately after the first notation If the experimenter writes his full name, and his experiment once, in the column provided for that purpose, his initials in the other columns will suffice.

Teacher:_____

Date _____ Group _____

Name of Child	1		2		3		Experimenter and Experiment	Unusual Conditions
	Time Taken	Time Ret'd	Time Taken	Time Ret'd	Time Taken	Time Ret'd		

[1] Posted on staff bulletin board of each group and notations made there

Record Blanks in the Preschool Laboratories

Stoddard
Form 1
October, 1931

ATTENDANCE RECORD[1]

Iowa Child Welfare Research Station
State University of Iowa

Week of_____ Group:_____

Name	Mon.	Tues.	Wed.	Thurs.	Fri.	Total Times Present	Reason for Absence

[1] Kept by head teacher of each group and sent to preschool secretary at end of each week.

Form 2—11:36·4694

ATTENDANCE RECORD[1]

Preschool Laboratories, Iowa Child Welfare Research Station

Name of child_____ No._____
(Surname first)

Date of birth_____ Sex_____
Month Day Year

Name of parent_____
(Surname first)

Session	Group	Days Entered after Opening Day		Days Possible Attendance		Days Absent		Days in Attendance	
		1st Sem.	2nd Sem.	1st Sem.	2nd Sem.	1st Sem.	2nd Sem.	1st Sem.	2nd Sem

[1] Record for card file, brought up to date for each child at end of each semester.

	SESSION DAYS			
Session	1st Sem.	2nd Sem.	Summer	Vacation Days

Session dates, whether for semester or summer, are always inclusive.

INVENTORY RECORD[1]

Article_____ Cost_____

Place of purchase_____ Date_____

Group_____

* * *

Updegraff
Form 5
March, 1936

RATING SCALE FOR NURSERY SCHOOL TEACHERS

Ruth Updegraff, Ph.D.
Iowa Child Welfare Research Station

STATE UNIVERSITY OF IOWA, IOWA CITY

Name of person rated_____ Date_____

Position of person rated_____ Name of rater_____

How long have you known her?_____
Under what conditions and how frequently have you had opportunities to observe her work?_____

Have you had any professional connection with her work? If so, indicate type.

Purpose of the scale: This scale has been designed to provide a means of evaluating the ability of a nursery school teacher by presenting a comprehensive yet workable summary of the attitudes, abilities, and characteristics which are desirable in such a teacher. A valid and reliable measure should be of value not only as an initial evaluation but, when repeated, should indicate change.

In addition, its aim is to furnish clear and definite objectives for students. A rating scale should constitute a specific means by which a student may check her own work and attempt to improve it. To be consistent with this aim, only desirable characteristics have been included. In some cases the undesirable aspect may have been included by implication

Use of the scale It is intended for the use of supervisors, instructors in teacher training, or teachers having supervision over other teachers.

It necessitates as a rater one whose judgment is competent.

[1] Kept in office of preschool secretary. (Brought up to date in May of each year by head teacher of each group)

It may be used as a self-rating scale

Information concerning the scale The scale is in three parts: Section I, Personality, referring to the teacher as an adult in contact with adults, Section II, Characteristics in teaching; Section III, Objectives for the child as indicated by teacher activities.

Directions for making ratings are given on the first page of each section

The rater: As indicated above, the rater should be competent to make the judgments required. He must be familiar with the standards of good teaching and be an expert observer.

The rater should be thoroughly acquainted with the work of the teacher who is being rated.

The rater should not consult with anyone in order to form judgments; only the rater's estimate is desired.

In rating, the rater should disregard every other item but the one in question, in other words, care must be taken to guard against being influenced by a general impression.

Updegraff
Form 5
March, 1936

RATING SCALE FOR NURSERY SCHOOL TEACHERS[1]

Iowa Child Welfare Research Station

STATE UNIVERSITY OF IOWA, IOWA CITY

Name_____ Rater_____ Date_____

SECTION I

PERSONALITY

a. This section refers to the teacher as an adult in contact with adults.
b. In this section make a check in front of one of the seven degrees. Be sure to think of the teacher's personality with adults, not with children.
c. The standard is that of nursery school teachers as a group To be "outstandingly superior" in a characteristic indicates that the person so rated equals the one or two best in this respect that the rater has ever seen. "Average" refers to that degree to which a characteristic is found in the average nursery school teacher. "Outstandingly inferior" refers to the manifestations in a characteristic which typify the behavior in this respect of the one or two worst nursery school teachers the rater has ever seen.
d. Mark *x* preceding those ratings concerning which you feel very confident.

1. Intellectual or scholastic ability

____Outstandingly superior ____Distinctly above average ____Above average ____Average ____Below average ____Distinctly below average ____Outstandingly inferior

2. Conversational ability, ease in expression

____Outstandingly superior ____Distinctly above average ____Above average ____Average ____Below average ____Distinctly below average ____Outstandingly inferior

3. Ability to express meaning, size of vocabulary, discrimination in use of words

____Outstandingly superior ____Distinctly above average ____Above average ____Average ____Below average ____Distinctly below average ____Outstandingly inferior

[1] Each assistant teacher and practice teacher rated at the end of each semester by the head teacher in charge of the group in which she has been teaching.

4. Is tactful, does not antagonize adults

Outstandingly superior	Distinctly above average	Above average	Average	Below average	Distinctly below average	Outstandingly inferior

5. Is resourceful in a practical way, has "common sense"

Outstandingly superior	Distinctly above average	Above average	Average	Below average	Distinctly below average	Outstandingly inferior

6. Possesses a sense of humor

Outstandingly superior	Distinctly above average	Above average	Average	Below average	Distinctly below average	Outstandingly inferior

7. Possesses social poise, is at ease in social situations

Outstandingly superior	Distinctly above average	Above average	Average	Below average	Distinctly below average	Outstandingly inferior

8. Possesses emotional poise, remains calm and controlled in startling or difficult situations

Outstandingly superior	Distinctly above average	Above average	Average	Below average	Distinctly below average	Outstandingly inferior

9. Thinks objectively, without personal bias or reference

Outstandingly superior	Distinctly above average	Above average	Average	Below average	Distinctly below average	Outstandingly inferior

10. Is sincere and genuine, is not given to flattery, deception, etc.

Outstandingly superior	Distinctly above average	Above average	Average	Below average	Distinctly below average	Outstandingly inferior

11. Cooperates well with adults, is willing to take share of responsibilities

Outstandingly superior	Distinctly above average	Above average	Average	Below average	Distinctly below average	Outstandingly inferior

12. Capable of a give-and-take of ideas

Outstandingly superior	Distinctly above average	Above average	Average	Below average	Distinctly below average	Outstandingly inferior

13. Is interested in activities other than preschool education, has a variety of interests, and likes to keep in touch and progress with them

____Outstandingly superior ____Distinctly above average ____Above average ____Average ____Below average ____Distinctly below average ____Outstandingly inferior

14. Ability to form opinions independently of the opinions of her associates

____Outstandingly superior ____Distinctly above average ____Above average ____Average ____Below average ____Distinctly below average ____Outstandingly inferior

15. Welcomes new ideas, is flexible as shown by willingness to consider new ideas

____Outstandingly superior ____Distinctly above average ____Above average ____Average ____Below average ____Distinctly below average ____Outstandingly inferior

16. Has an intelligent, informed interest in childhood

____Outstandingly superior ____Distinctly above average ____Above average ____Average ____Below average ____Distinctly below average ____Outstandingly inferior

17. Understands children on their own level, does not unthinkingly ascribe to them the motivations, enjoyments, and understanding of adults

____Outstandingly superior ____Distinctly above average ____Above average ____Average ____Below average ____Distinctly below average ____Outstandingly inferior

18. Likes children, shows a wholesome degree of real enjoyment of them and sympathy for them

____Outstandingly superior ____Distinctly above average ____Above average ____Average ____Below average ____Distinctly below average ____Outstandingly inferior

19. Is attractive as measured from the adult standpoint

____Outstandingly superior ____Distinctly above average ____Above average ____Average ____Below average ____Distinctly below average ____Outstandingly inferior

20. Is neat, both in respect to personal appearance and orderliness of environment

____Outstandingly superior ____Distinctly above average ____Above average ____Average ____Below average ____Distinctly below average ____Outstandingly inferior

21. Has a pleasant, interesting voice

____Outstandingly superior ____Distinctly above average ____Above average ____Average ____Below average ____Distinctly below average ____Outstandingly inferior

22. Speaks clearly, enunciates distinctly, and is easily understood

___Outstandingly superior	___Distinctly above average	___Above average	___Average	___Below average	___Distinctly below average	___Outstandingly inferior

23. Admits errors and mistakes, welcomes suggestions

___Outstandingly superior	___Distinctly above average	___Above average	___Average	___Below average	___Distinctly below average	___Outstandingly inferior

24. Is reasonably and objectively self-critical

___Outstandingly superior	___Distinctly above average	___Above average	___Average	___Below average	___Distinctly below average	___Outstandingly inferior

25. Is interested in people, thinks in terms of helping them rather than of criticizing

___Outstandingly superior	___Distinctly above average	___Above average	___Average	___Below average	___Distinctly below average	___Outstandingly inferior

26. Happy, seems to enjoy life

___Outstandingly superior	___Distinctly above average	___Above average	___Average	___Below average	___Distinctly below average	___Outstandingly inferior

Updegraff
Form 5
March, 1936

RATING SCALE FOR NURSERY SCHOOL TEACHERS

Iowa Child Welfare Research Station

STATE UNIVERSITY OF IOWA, IOWA CITY

Name_____ Rater_____ Date_____

SECTION II

Characteristics in Teaching

Directions

a Make an indication in front of each item.
b Mark *x* in front of those items in rating which you feel particularly confident as far as the individual rated is concerned
c Rate −3 if she ignores almost all opportunities.
d Rate −2 if she ignores a large proportion of opportunities.
e. Rate −1 if she tends to ignore more opportunities than she uses.
f. Rate 0 if she uses an opportunity about as frequently as she ignores it.
g. Rate +1 if she tends to use more opportunities than she ignores
h. Rate +2 if, of the opportunities which arise, she utilizes a large proportion
i. Rate +3 if she makes use of almost every opportunity
j. If you feel you have not had opportunity to observe in regard to any item, indicate this by *N O.* preceding the item.

1. () Sees a new proposal in its different aspects and tries it in an experimental mood
2. () Gives careful thought to new ideas. Does not try anything blindly or indiscriminately.
3. () Is actively alert to recognize and utilize spontaneously appearing needs, interests, and occasions which have teaching value.
4. () Her school program is flexible in that she can and does readily adjust to those opportunities which arise. She does not depend upon these, however, for the direction of the day's opportunities.

5 () Treats child's possessions and projects with care.
6 () Is willing to listen to what a child says or to explain why she cannot do so. Appears interested.
7. () Shows by her speech and conduct with a child that she realizes he is a sensitive, thinking individual.
8. () Keeps promises.
9. () Shows no partiality in dealing with children.
10. () Makes only those promises which can be kept
11. () In cases of conflict makes an effort to investigate both sides.

12 () If unable to obtain adequate information in case of conflict, makes a decision of equal advantage and disadvantage to both children, explaining her reason.
13. () Takes time to give a promise, reason, or explanation if the situation demands one. Is not autocratic or abrupt Is a good judge of the needs of the situation in this respect.
14. () Dealings with children evidence a desire to act always with a reason and to aid the child in seeing the reasonableness of her request.

15. () Uses different, though consistent, methods in dealing with different children.
16. () Shows awareness of differing moods of children, adjusting her standards for them at times when they are fatigued, irritated, etc.
17. () By records, comments, or discussion shows awareness of progress or lack of it in child's behavior.
18. () Considers a child's behavior and progress in relation to teacher's methods and school situation.
19. () Considers child's behavior as symptomatic—looks behind it for causes
20 () Provides or devises equipment to suit children's new or temporary needs.

21. () When she recognizes a teaching need, she is able to muster available possibilities in order to work out her problem. If she does not succeed in one way, tries another.
22 () Is ingenious in devising inexpensive equipment substitutes.
23 () Is clever in helping children in practical, manual ways.
24 () Is reluctant to admit that difficulties are insurmountable.
25 () Has a plan concerning what she is working toward and sees and uses spontaneously arising opportunities in relation to it.

26. () Enjoys humorous incidents with the children. Seems to enjoy laughing with them.
27. () If she points out an object or incident to a child as being amusing, she seems genuinely amused herself so that her feeling is contagious.
28. () Quick to see the humor in a situation.
29. () Shows by her demeanor during children's laughter that she is sympathetic in their humor. Understands that their humor frequently differs from that of adults.

30. () Holds in mind the situation of the entire group, even when dealing with a small part of it.
31. () Is aware of the whereabouts of each child.
32 () Is aware of activities of other teachers and of group as a whole Does not break into a situation another teacher is handling or watching

33. () Manner is such that she does not cause strain and tension in the children
34 () Is conscious of abnormal strain and tension and takes steps to counteract it.

35 () Arranges equipment and activities so that no one place indoors or out is overcrowded.
36 () Sees and removes distracting influences in a situation
37 () Suggestions are so made that a child is not antagonized
38 () Manner of directing or redirecting child's attention is subtle.
39 () Maintains a satisfactory and wholesome balance in helping children solve problems Knows when and when not to enter situations.
40 () Effect on the child is calming.
41 () Her contacts with the children are easy and of sufficient warmth and naturalness that she does not seem either cold or impersonal.
42 () Is successful in handling a group situation The children are not restless, they are interested. Certain children are not allowed to dominate more than is their share.
43. () Is appropriately unobtrusive as a member of the group That she controls the situation is not apparent to the casual observer Her control is indirect rather than direct

44 () Talks easily with the children
45. () Speaks naturally with them
46 () Speaks readily when the occasion demands but does not keep up a running conversation. Is not voluble.
47. () Uses action when action is desirable, does not substitute conversation for it.
48. () Demeanor is such that she seems aware and sure of what she is doing without being flauntingly or unpleasantly self-confident or self-conscious.
49. () Makes the decisions for the group, *i.e*, is aware of and takes her responsibility.
50. () Is able to keep the entire group in her mind, yet handles interruptions and emergencies efficiently and calmly.

51. () Reads in her own and related fields
52. () Discusses pertinent problems (not, however, in inappropriate places).
53. () Joins professional groups.

54. () Keeps adequate records Uses all records she keeps.
55. () Maintains high standard of professional ethics in regard to children and staff.
56. () Is systematic in taking or delegating all responsibilities for the smooth operation of the group.
57. () Gives directions clearly.
58. () Sees her share of responsibilities.
59. () Makes sure that she carries her share of responsibilities.

SECTION III

Objectives for the Child as Indicated by Teacher Activities

Directions

a. Make an indication in front of each item.

b. Mark *x* in front of those items in rating which you feel particularly confident as far as the individual rated is concerned.
c. Rate −3 if she ignores almost all opportunities
d. Rate −2 if she ignores a large proportion of opportunities.
e. Rate −1 if she tends to ignore more opportunities than she uses.
f. Rate 0 if she uses an opportunity about as frequently as she ignores it
g. Rate +1 if she tends to use more opportunities than she ignores
h. Rate +2 if, of the opportunities which arise, she utilizes a large proportion
i. Rate +3 if she makes use of almost every opportunity.
j. If you feel you have not had opportunity to observe in regard to any item, indicate this by *N.O.* preceding the item

Physical Well-being

1. () Throughout the day takes steps to insure adequate temperature
2. () Throughout the day takes steps to insure adequate light.
3. () Throughout the day takes steps to insure adequate ventilation
4. () Knows minimum facts about the common children's diseases.
5. () Knows minimum facts about first aid
6. () Possesses at least the minimum supply of equipment to administer first aid.
7. () Is alert to observe signs of infection in a child, *i.e.*, nasal congestion, throat irritation, drowsiness, feverishness, unusual irritability or lassitude.
8. () Isolates an infectious child.
9. () Throughout the day takes steps to insure that children are adequately dressed, both indoors and out
10. () Uses outdoor play space at least a minimum amount of time.
11. () Foresees situations which are physically dangerous for the child, evidenced by (a) careful supervision, (b) prohibition, (c) instruction.
12. () Prevents destruction of equipment.
13. () Encourages full-body play by the child.
14. () Adjusts equipment to provide full-body play indoors when weather makes outdoor play impossible.
15. () Shows throughout day she is alert to perceive fatigue in a child.
16. () Takes steps to prevent fatigue.

Intellectual Development

17. () Shows a sincere interest in a child's questions by listening to them.
18. () When a child questions, she either answers immediately or promises to answer at some future time, explaining the postponement.
19. () Her answers are such that the child not only has the question answered but is given information in such a way that further thought on his part is encouraged.
20. () Shows by her manner of approach that she is trying to speak so that the child may comprehend most of what she is saying, does not overload him with new concepts or new words.
21. () In making an explanation tries to relate it to some fact or concept already in the child's possession.

22 () By giving the child leads and an outline for seeing similarities or differences, additional relationships or conclusions, encourages him to think actively himself

23. () Does not make explanations and talk in the same way to all the children

24. () Does not answer questions in such a way that further thought on the child's part is discouraged

25. () Is actively concerned in giving the child new experiences as fast as he is capable of assimilating them, not to the point of overstimulation and excitation or at the expense of other phases of development Recognizes environmental opportunities, makes them, plans excursions

26. () Frankly expresses curiosity and a desire to learn, making such an attitude interesting to the children

27. () When a child is faced with a situation which constitutes a problem for him, she not only encourages and commends his efforts to solve it but gives him as much aid as he needs to make the solution himself. Possibly she solves it with him At any rate, she encourages effort and thought on the part of the child. Not an undue emphasis on verbal directions.

Emancipation

28 () When a child needs security, she reassures him without at the same time making him too dependent upon her.

29. () Tries to give child satisfaction and pleasure in self-accomplishment and at the same time to avoid encouraging him to gain that satisfaction from the praise or admiration of another.

30. () For the child who gets much of his satisfaction from social contacts and is dependent upon others for his stimulation and activity, she tries to encourage independent effort and decisions by making opportunities for these and commending the child's success.

Emotional Control

31. () When child is crying unduly or making an unnecessary emotional expression, she takes kind but firm steps to encourage the child to practice more self-control. This is done on a reasonable basis.

32. () Shows sympathy for child's problem at same time that she is encouraging self-control of his own emotions.

33. () When child becomes overexcited, overjubilant, or continuously hilarious, she takes helpful steps to remind and encourage him to steady himself.

34. () Gives the excitable child opportunity for seclusion or rest, time to be alone, when he appears fatigued.

35. () Is sympathetic when child through inability or difficulty is in a situation of discomfort to him.

36 () When child does not put forth the amount of effort of which he is capable to overcome a difficulty, so that discontinuing efforts means dodging the issue, the teacher uses this definitely as a teaching situation. She gives him a judicious amount of help but elicits cooperation and tries to

give him satisfaction in working in the face of difficulty She helps him only as much as is necessary in order that he may see it through himself

37. () When child is faced with difficulty, teacher tries to help him see any relation of that difficulty to himself and how he may try to alter his own reactions

38. () Teacher permits child to fail at times in order that he may be taught to meet failure. As she sees him fail, even in the face of effort, she helps him face the failure, accept it if necessary, and not avoid it, rationalize, become critical, develop an unwholesome feeling of inferiority

39. () Is aware of a child's failing or succeeding and tries to provide a wholesome and challenging amount of both success and failure.

Self-reliance

40. () In routine situations sees that child participates as much as he is able to do If she does anything for him, there is still a part of the routine that is somewhat difficult for him. Commends his accomplishment of a difficult task.

41. () In a problem type of situation which the child is having difficulty in solving, she so directs him that he has to contribute at least one step in the way of solution This step is not entirely at her direction.

42. () When child asks for help, she makes sure that in helping him she secures a contribution on his part. Assistance is given in such a way that the child wants to continue and puts forth effort himself.

43. () Tries to give information and practice to a child in situations in which he lacks confidence

Friendliness

44. () Encourages friendliness in the group by subtly calling to attention interesting activities of each child, so that each child has an opportunity to be interesting to his fellows.

45. () Brings out the fact that the other child has feelings Tries to suggest to children how they would feel in situation such as another is in. Does not depend entirely on verbal means or overutilize conflict situations to this end.

Social Responsibility and Adjustment

46 () The rules of the group, group ownership, sharing, etc , are explained on a reasonable basis, so that the child has an underlying concept concerning the reason for them.

47. () Explains relations between individual rights and group rights. Has in her own mind a clear conception and explanation of the group rules so that these can be presented with meaning.

48. () By plans for individual children indicates that she is trying to encourage social poise Certain children need to be aided in their social relationships, to be better followers or better leaders Others need more opportunity to discover the possibilities of enjoyment in solitude.

Reasonableness

49. () Encourages reasonableness in a child by giving him a reason for those of her own actions which are related to him and for her requests She need not do this at great length or at the exact moment, but her purpose is obviously to have a justifiable reason for her own actions
50. () Encourages the child to think before he acts by discouraging impulsive acts emotionally stimulated and helping him to plan his actions on a reasonable basis

Aesthetic Appreciation

Provides pictures, music, and literature of recognized artistic merit as a part of the child's school environment Provides as much variety as children can digest.

51. () pictures
52 () music
53 () literature

Shows her interest in the above by enjoying them, rearranging them, renewing, etc. Not necessarily by talking

54. () pictures
55. () music
56. () literature

Takes advantage of the opportunities in which a child shows interest by bringing out facts or experiences related to them which will interest the child.

57. () pictures
58. () music
59. () literature
60. () Respects a child's interest in them by not interrupting his enjoyment abruptly, by following leads of his interest.
61. () Takes advantage of special occasions, such as exhibits, concerts, etc., for children unusually interested, securing parent's interest and cooperation.

Development Creatively

62 () Is aware of a child's efforts to experiment and make new combinations and indicates it by showing her appreciation.
63. () Is not satisfied with just any product to the extent that she praises it (not the effort) unqualifiedly. Her comments are such that she shows the child the good points about what he has done. She subtly, however, points out a possible line along which the child might work, either on this product or another. Her comments are not given in such a manner that she inhibits further attempts or interest. She works with him.
64 () Has creative ability musically.
65 () Has creative ability of a literary kind.
66 () Has creative ability in plastic or graphic art.

67. () Provides a rich environment to give the children experiences which they may enjoy and which may stimulate creative expression.
68 () Is quick to appreciate a suggestion or action of a child which either indicates a creative impulse growing out of such an experience (see 67) or which may lead to such an impulse.

Acceptable Voice, Speech, Language

69 () Encourages a child who characteristically speaks faintly to speak louder, by commending instances of the latter By the same means encourages more moderate voices in children who speak too loudly or too excitedly She does not do this in such a way or by calling such attention to the incident that she inhibits the child's desire to talk.
70. () Encourages children to ask what words mean Explains meanings. Illustrates. Evinces interest in words, similar words, different words, words with interesting sounds, etc.
71. () Talks in language which is of a complexity suited to the understanding of the child with whom she is talking. He is both comprehending and interested.
72. () By explaining the meaning of words without being requested to do so, she indicates that she is trying to increase the child's vocabulary and make him enjoy the use of language
73. () In case of a child's speech difficulty, avoids embarrassing the child on that account and tries either to ascertain from an expert what treatment, if any, is advisable or, if she is equipped to give aid, does so.

Motor Control and Coordination

74. () Provides opportunity for the exercise of a variety of physical activities
75. () By making certain activities seem temporarily attractive, she encourages child not to limit himself to one or two others to which he is particularly addicted.
76. () Gives child opportunity for manipulating various kinds of materials
77. () Watches child's progress in motor control and manipulation in order to challenge him slightly beyond his present skill.

Parent Cooperation

78 () Is willing to listen to the parent's difficulties, explanations, etc.
79. () Is convinced that situations cannot always be handled in the home in a similar way or as simply as in school
80. () Tries to keep parent informed concerning child's progress along all lines Shows her records to the parents.
81 () Asks parents for help.
82 () Attitude is *with* not *down to*

Equipment

The following list of equipment indicates material used by First Group, by Second and Third Groups, and by Junior Primary. Since Second and Third Groups are housed in the same building at different times, their equipment is listed together with certain indications for exclusive use by one group or the other. The overlapping of equipment for the other groups may appear more extensive than is actually the case. Second Group may use certain equipment toward the end of the school year, while similar equipment is used primarily by the four-year-olds at the first of the year.

These lists are comprised only of movable equipment, with the exception of certain stationary outdoor apparatus and the balcony in First Group. Cupboards, shelves, stationary built-in boards, and other pieces of built-in equipment are not included. Materials provided primarily for the use of teachers or adults, such as cleaning equipment, cooking equipment, or office supplies have been omitted.

Books, victrola records, and pictures are listed separately.

FIRST GROUP

Equipment	*Dimensions*
Climbing apparatus	54 in × 54 in × 64 in
Large packing box	47 in × 33 in. × 32 in.
Climbing sawhorse	32 in high, 6 steps on each side
Ladder	79 in, 12 rungs
Platform with steps	38 in × 38 in × 47 in. high, rail 24 in. high, 9 steps
Incline with steps	82 in. × 38 in. × 18 in. high, 3 steps
Sandbox	7 ft. × 7 ft. × 1 ft. high
Miscellaneous sand toys	
1 Set wooden sand toys	
Trapeze	
Set of hanging rings	
2 Swings	
6 Shovels	
6 Rakes	

Equipment

Equipment	*Dimensions*
2 Sleds	
Large wagon	
Medium-sized wagon	
Large animal cage	
4 Boxes	24 in. × 12 in. × 11 in.
3 Nail kegs	
4 Logs	18 in. long, diameter about 10 in.
Incline	10 ft. long, 9 in. high
Balcony, with steps, ladder, trapeze	
Table	73 in. × 25 in × 21 in. high
Ladder	64 in. long, 10 rungs
2 Planks	10 ft. × 18 in.
4 Planks	8 ft. × 10 in.
Plank	64 in. × 12 in.
Plank	41 in. × 12 in.
Rocking boat	
3 Small tricycles	
Medium-sized tricycle	
19 Chairs	
3 Chairs	Seat 6¼ in. from floor
4 Chairs	Seat 9 in. high
1 Chair	Seat 8½ in. high
8 Chairs	Seat 10 in. high
2 Chairs	Seat 10¼ in. high
1 Chair	Seat 12 in. high
5 Tables	
1 Gate-legged table	42½ in. × 36 in. × 18 in. high
1 Folding table	32 in. × 16 in. × 19 in. high
1 Folding table	32 in. × 16 in. × 12 in. high
2 Tables	36 in. × 20 in. × 16 in. high
48 Hollow wooden blocks	12 in. × 8 in. × 6 in.
Wooden Blocks	
14	12 in. × 6 in. × 2 in.
25	8 in. × 3 in. × 3 in.
20	8 in. × 3 in. × 1½ in.
2	4 in. × 4 in. × 4 in.
6	36 in. × 3 in. × 2 in.
Dozen Fisher-Price Blocks	
6 One-half units	2¾ in. × 2¾ in. × 1¼ in.
8 Units	5½ in. × 2¾ in. × 1¼ in.
6 Double units	11 in. × 2¾ in. × 1¼ in.
6 Quadruples	22 in. × 2¾ in. × 1¼ in.
2 Curved pieces	
4 Large cylinders	5½ in., diameter 2½ in.

Equipment		*Dimensions*
2	Small cylinders	5½ in., diameter 1¼ in
2	Right-angle triangles	5½ in. × 2½ in
2	Right-angle triangles	2½ in. × 2½ in

2 Wooden hoops
Set wooden farm animals
18 Unpainted interlocking blocks
3 Wooden interlocking trains
8 Small, heavy rubber automobiles (trucks, racers, sedans)
Buddy L truck
Large wooden truck
10 Balls, assorted sizes
Large wooden train engine

Small, colored basket with handles
500 Colored wooden beads, 1 in. in diameter
Shoe laces
Peg wagon with large pegs
Large pegboard
2 Bingo beds
Nest of blocks
6 Miscellaneous small, painted boxes
2 Occupational-therapy puzzles

Workbench
6 Hammers
Pair pliars
Nails, various sizes
Tin washers
Screws, tacks, bolts, etc

Large-sized nuts and bolts
Sections of piping
Large zinc washtub
Watering can
Large zinc pan

2 Easels
24 Paintbrushes
24 Paint glasses
Water colors, liquid, vegetable coloring
Unprinted newspaper
23 Oilcloth aprons
2 Large oilcloths for floor
Powdered clay
Large kettle with cover for clay

Earthenware crock for clay
10 Boxes large crayons
Colored construction paper
6 Pairs blunt scissors
Paste
Glue
2 Blackboards
Chalk
Miscellaneous rope, twine, string

Upright piano
Victrola
Song bells, 1½ octave
Xylophone

Tambourine
2 Triangles
18 Wrist bells

Large doll bed (3 ft. × 2 ft.)
Small doll bed
Doll trunk
6 Very small rubber dolls
3 Dolls, rubber, washable, 8 in. long
Doll carriage
3 Brooms, small
Mop, small
2 Washtubs

Washboard
3 Small clothes baskets
Clothespins
Ironing board
2 Irons
10 Pieces of colored print (1 yard square)
Small aluminum dishes, baking pans, etc. (miscellaneous)
6 Purses

Equipment

2 Aquariums
5 Flower bowls
3 Flower holders

15 Small canvas cots
18 Cotton blankets

2 Dozen face towels
2 Dozen washcloths
Paper towels
2 Containers for paper towels
Paper handkerchiefs
Soap
1 Clothes rack

12 Flowerpots
Bird feeding station

18 Chenille rugs
18 Market baskets for clothes and blankets

2 Dozen teaspoons
2 Dozen sherbet cups
3 Trays
2 Pitchers
2 Wastebaskets
Paper napkins
Toilet paper

SECOND AND THIRD GROUPS*†

Slide, wooden
Teeter-totter
Rubber-tire and rope swing
Bouncing board, 12 ft.
Rod
Swing, detachable
Trapezes
Incline with steps
Climbing apparatus
Wagons, 1 wooden, 3 metal
 36 in. × 15 in × 11 in high
Tricycles
 2 16 in front wheel
 1 15 in front wheel
3 Sleds
Wheelbarrow, metal
Rope
String
† Sand toys
1 Basketball

Planks
 4 5 in. × 6 ft.
 7 10 in. × 4 ft.
Boxes
 1 3½ ft. × 3½ ft. × 4 ft.
 2 4 ft. × 2½ ft. × 1½ ft.
 2 3 ft. × 4 ft. × 2½ ft.
 2 3 ft. × 2 ft. × 2 ft.
Ladders
 4 6 ft., rungs 6½ to 12 in. apart
 1 4 ft., rungs 8 in. apart
Sawhorses
 2 18 in. high
 2 24 in. high
Shovels
 3 23 in.
 3 26 in.
3 Balls, heavy rubber, valve type, 12 in., 10 in., and 9 in. in diameter

Tables
 6 Folding
 31½ in. × 16½ in. × 19 in.
 36 in. × 17½ in. × 19½ in.
 36 in. × 16 in. × 19½ in.
 31 in. × 16 in. × 19 in.
 3 Oak, adjustable height, 39 in × 24 in.
 1 Drop-leaf, 41 in. × 35 in × 20 in. (extended)

* Used by Third Group only
† Used by Second Group only

2 Oblong upright, 47 in × 26½ in × 18 in
1 Oval, 36 in. × 21 in.

Chairs
6 Posture, 7 in , 9½ in , 10 in , 10¾ in. high
2 Wicker rockers
36 straight, 8¾ in , 9 in., 9½ in , 10 in., 10¾ in., 11½ in , 12 in

Bookcases
2 3 ft × 16 in. × 9 in deep, shelves 9 in. apart
1 40 in. × 14½ in., movable shelves

Chests and cupboards
1 Chest for clay, 37 in. × 20 in × 12 in
1 Chest, 30 in × 9½ in × 26 in.
1 Open rack, 36 in. high
1 Set of shelves, 30 in × 9½ in. × 26 in., shelves 12 in apart
1 Set of shelves, 51 in × 9½ in. × 13 in., shelves 12 in apart
2 Sets of shelves, 27 in. × 30 in., shelves 10 in. apart
1 Set of shelves, 64 in. × 30 in , shelves 10 in. apart
1 Set of shelves, 29½ in × 9½ in × 26 in

Apron rack, 36 in high
2 Pairs of candlesticks
2 Pairs of book ends
3 Mirrors
Alarm clock
2 Thermometers
String
Rope
5 Vases
Paper sacks
Window boxes, built-in

6 Wicker baskets
† 20 Wire baskets
2 Market baskets, for rubbers and overshoes
* 24 Lockers, movable wooden, in two sets
2 Corner cupboards
Bench, low
3 Bulletin boards
† 4 Sets of lockers (for rugs)

*12 Puzzles, jigsaw, 6, less difficult, used by Second Group
Clay powder
Chalk, assorted colors and white
12 Pairs of scissors, round and sharp points
*Glazed paper, for finger painting
Construction paper
Manila, 9 in. × 12 in.
Colored, 9 in. × 12 in. (thin); 12 in. × 18 in. (heavy)
Crayons, ½ in × 4½ in.
Christmas materials
Cord

* Used by Third Group only.
† Used by Second Group only.

Equipment

Tinsel
Assorted Christmas paper
Wrapping paper, red and green
Painted cones
Icicles

Paints
Blue alabastine
Vegetable colors, yellow, green, and red
*Water colors, boxes

*3 Easels, 48 in × 25 in, 32½ in. spread, shelf for glasses, 5 in. deep, holes for glasses, 2¾ in in diameter

†2 Easels, 39 in × 34 in, 20 in. spread; shelf for glasses, 3½ in deep, holes for glasses, 2¾ in in diameter

Unprinted newspaper (for easel painting)

*Shellac
Paste
Paste brushes
Paintbrushes, 8 in. and 4 in
Paste dishes
12 Pencils, large
12 Aprons
Oilcloth covers
*Linoleum squares for finger painting
2 Blackboards
Bucket (for clay)

3 Tin trays for paint glasses
34 Glasses for paint
4 Glass bottles for paint
*Tintex dye
Oilcloth mats
*5 Packages quilt patches
*Feathers
*10 Yards ribbon
*Sewing equipment
*Yarn

Hollow blocks, wooden
16, 12 in. × 12 in. × 6 in.
8, 24 in. × 12 in × 6 in.

Fisher-Price blocks
4 Dozen squares
2 Dozen small triangles
2 Dozen large triangles
2 Dozen pillars
3 Dozen large cylinders
2 Dozen small cylinders
3 Dozen curved pieces
7 Dozen quadruples
16 Dozen units
9 Dozen doubles

Patty Hill blocks
9 long
7 medium
6 short
8 standard
1 wheel

7 Half oblong blocks
53 Oblong blocks
6 Nested blocks, the largest 18 in. × 18 in. × 12 in.
4 Boxes, 15 in. × 10 in. × 8 in.
Box assorted color blocks, cubes, diamonds, circles, hexagons, all about 1 in.

2 Workbenches with vises, 36 in. × 21 in. × 20 in. high; 59 in. × 22 in. × 21½ in. high
Worktable, 31 in. × 72 in. × 14 in.

*Wooden wheels
*Stanley block pane
*Suction sticks
*Bushing removers

* Used by Third Group only.
† Used by Second Group only.

*Brace, 3 bits
†Screwdriver
Nails, 1 in., 2 in., 3 in.
*Screws, 1 in. and 2 in
6 hammers, 12 in
*Brads
3 Saws, crosscut, 15½ in. blade
*2 Saws, coping
*Keyhole saw
*Gimlet
*Pair pliers, large
*Ruler, 12 in
*Carpenter's rule
*4 Casters, large
*Sandpaper
Wood scraps
Weather-stripping enforcers (round metal)
2 Large laundry baskets, for wood
*Miter box (wood)
*Dowel sticks

*Lights, glass
*Pulleys
*Oilcan
*Oil pitcher
*Clamps
*Hinges
*Bicycle pump
*Automobile chains
*Large chains
*Work kit
*Fan belt
*Fan assembly
*Rope
*6 Yards rubber hose
*Syphon
*1 Yard leather
Scales
*1 Stove handle
*1 Metal breadbox
*1 Coal bucket
*Wooden mixing bowls

Piano
Radio-phonograph
Cymbal
Drum
Tomtom
Castanets
*2 Tambourines

*5 Triangles, 2 medium, 2 small bells
Wrist bells
Hand bells
Cowbell, small
Set of chimes, G, C, E, G above middle C
Set illustrations of musical instruments

Orange-crate settee
Rocker, wooden
Doll crib, 16 in × 27 in. × 20 in. high
Doll bureau
Doll chest, 36 in. × 13½ in. × 24 in high
Doll table, 30 in. × 13 in.
Doll buggy
Orange-crate cupboard with curtains
2 Toy irons
2 Dolls
Small dolls and animals
Assorted doll clothes
Materials, seersucker, organdy, cheesecloth, silk, velveteen, satin
25 Yards cloth for costumes, etc

1 Tea set
Dustpan, small
Dust mop, small
Dozen clothespins
Bubble equipment
10 pans, 8 in. in diameter
12 pipes
7 Boats
2 Airplanes
6 Farm animals
2 Dump trucks
4 Cars, small
10 Cars, trucks, airplanes
1 Freight lighter
11 Wooden lox blox (train)
11 Aluminum lox blox (train)

* Used by Third Group only.

Equipment

1 Clothes hamper
2 Toy telephones
10 Wooden peg trains
24 Interlocking blocks (train)

Flowerpots
Riker specimen mounts
Animal cages
1, 25 in. × 31 in × 48 in , detachable house, 31 in. × 40 in. × 27 in., sloping roof, hinged door from cage, 8 in × 7 in.
1, 18 in. × 12 in. at base, 12 in. × 13 in at top, slant door, 7 in. × 4 in

Magnifying glass
Nature jars
2 Aquariums, 21 in. × 10¼ in × 13½ in.
2 Terrariums, 14 in. × 9 in × 11 in deep
Feeding station for birds
Cracked corn
Sunflower seed
Straw
Oats
Rabbit food
Turtle food
Fish net
Rubber hose
Fish food
Fungus cure
3 Magnets
Flashlight
Sprinkling can
Garden tools, shovels, trowels, rake (wooden)
Seeds
Bulbs
Aquarium plants

†22 Rugs
*16 Simmons beds
4 Cribs
*16 Bed curtains
*17 Rubber pads
*16 Mattresses
*20 Hanging cloth screens, on pulleys
*10 Canvas cots (used occasionally)
*Chest of drawers (for bed linens)
*60 Sheets
*24 Pairs of shoe covers
4 Turkish towels
40 Face towels, small
20 Washcloths, small
Oak chest, low (linens)
35 Small glasses
Paper napkins
15 Bibs, turkish toweling
12 Napkins, seersucker
24 Place doilies
3 12-in. electric fans, enclosed in wire mesh
6 Adult forks
5 Adult knives
34 Children's spoons
22 Children's knives
20 Children's forks
12 9-in. plates
64 8-in. plates
3 Cups
28 Cereal bowls
45 Sauce dishes
13 Bread and butter plates
12 Glass tumblers
71 Sherbet cups
24 Glass mugs
19 Beetle-ware cups
Small tin funnel
2 Large aluminum trays
3 Medium aluminum trays
Small oval tray
4 Round tin trays
1 Garden umbrella
Soap

* Used by Third Group only
† Used by Second Group only.

Paper towels, folding and rolled
Paper handkerchiefs (Nicolette)
5 holders for paper towels
3 Sanitary cans
Metal rimmed tags

7 Wastebaskets, 5 large, 2 small
Floral seals
Extension cords
Electric fans
*Thumbtacks
Spoon and fork (Heinig set)
25 Adult spoons

†Enamel
*Turpentine
†Shellac
Toilet paper
†Paper clips
*Paper brads
*Glue
Safety pins
Adhesive tape
Mending tape
Sewing supplies
Clothespins
1 Clothes drier

JUNIOR PRIMARY

2 Packing boxes, large, wooden, with handles
Chest, large wooden, for toys
Climbing rope
Horizontal iron bar on which apparatus is fastened
Horizontal swinging bar
3 Ladders (with chain and padlock)
Platform, 20 ft. × 20 ft., wooden, with storage space underneath (and padlocks)
Playhouse, two-story, attached to platform
Ring, swinging
Slide, wooden, movable (also used indoors)
Slide cover, canvas, with padlock
2 Swings, rope
Teeter, wooden
Sand toys, miscellaneous
Garden equipment, 4 sets, hoe, rake, spade
Sprinkling can, 4-qt
6 Snow shovels
4 Trowels, metal
2 Buckets, galvanized
2 Sand sieves

3 Screens, three-paneled folding
6 Tables, children's, 24 in × 39 in, 21 in high
3 Wastepaper baskets, metal
2 Boxes, large wooden
Chairs
 6, 11 in. high
 11, 11¾ in. high
 5, 12¼ in. high
 3, 14 in. high
 2, teacher's

Chalk, assorted colors
42 Boxes crayons
Dyes, Easter egg
Paint, enamel
Construction paper, assorted colors
Paper, manila drawing, 9 in × 12 in
Paper, manila, ½ in. squared, 9 in. × 12 in.
Paper, manila tag board
Paper, unprinted newspaper
Paper, wrapping

* Used by Third Group only

Equipment

2 Easels
24 Clay boards
Clay box, metal lined
6 Brushes, 2 in. wood painting
6 Brushes, Japanese water-color

3 Sugar bits, ¼ in., ⅜ in., 1 in.
3 Dozen bolts, 4 in., with washers and burrs
Brace
3 Hammers
Nails, assorted
Saw, hack
3 Saws, scroll, and blades
Screws, assorted
4 Dozen Screws, lag with washers and burrs (2¾ in.)
3 Dozen wheels, 6 in. wooden, for wagons

6 Glass tumblers
10 Pairs small scissors
Pair shears
Newspapers
Magazines to cut up

2 Barrels wood scraps
1 Workbench with vise and drawer
1 Panel saw
1 Spiral ratchet screwdriver
1 Screwdriver, 3 in.
1 Plane, true value
1 Set, 6 bits
6 Clamps, 2 in.
1 Keyhole saw
1 Square
1 Magnet

Envelopes
Paper cutter
Pencil sharpener
Clips
Clothespins
Erasers
Glue, liquid
Labels
Paste
Rubber bands
Thumbtacks
Tongue depressor
Spools, assorted sizes
Orange crates
Wooden boxes
Old cotton material for rag rugs

Quilt blocks of prints, size of postcard
Cigar boxes
Cloth (ordered each year as needed)
 Cretonne
 Curtain material
 Silkaleen or other material as needed
Cotton
Cord
Needles
Oilcloth
Pins
Tape measure
Thread
Yarn
6 Looms, small, for weaving

75 Blocks, 1 in. × 3¾ in. × 48 in.
100 Blocks, 1 in. × 3¾ in. × 30 in.
125 Blocks, 1 in. × 3¾ in. × 15 in.

Broom, small
Cooking utensils
Dishes, 1 set of china
3 Dolls

Mop, small
4 Tumblers, small glass
3 Telephones
Cash register

4 Baking sheets
4 Bowls, large

Teakettle, large aluminum
Kitchen scales

1 Bowl, small
6 Cooky cutters
Egg beater
4 Measuring cups
5 Pitchers
6 Rolling pins
Sifter
Spatula
6 Spoons
2 Kettles, large aluminum
2 Pails, 2-qt., white enamel covered
3 Dozen sherbet glasses
2 Trays, large, oval
Coffee pot, large white enamel (for tomato juice)
3 Small trays
2 Tubs, small
Washboard, small
Set of dishes

Coffeepot, white enamel
Dustpan
4 Candlesticks
Clock
Flag, large
Globe
2 Stereoscopes
2 Boxes stereoptican views
5 Pitchers, pint size
Paper napkins
Paper towels
2 Containers for paper towels
Soap

N B The science equipment and specimens used by this group vary from time to time. They are drawn from the science department of the University elementary school. A suggestive list may be found in the section on nature study.

The pictures listed on the following pages are, with the exception of the posters, the start of a permanent collection centrally located and taken out for temporary use by any of the groups.

PICTURES

Title	Artist	Press	Size
Domestic Animals *Cats* *Chickens* *Geese* *Goats* *Pigeons* *Rabbits* *Sheep*	Chapelet	Art Extension Press (distributor)	18 by 21 in.
The Goose Girl	Muriel Dawson	Medici Society	17½ by 20 in
On the Seashore	Muriel Dawson	Medici Society	17½ by 20 in.
Winter	Maggie Salcedo	Outdoor Series	17½ by 20 in.
Hush-a-bye Baby	Jessie Willcox Smith	Campbell Prints	8½ by 11½ in.
I Like Little Pussy	Jessie Willcox Smith	Campbell Prints	8½ by 11½ in.
Little Miss Muffett	Jessie Willcox Smith	Campbell Prints	8½ by 11½ in

Part of them are permanently framed; part are cloth-backed and when used are inserted in adjustable frames.

The following pictures are mounted, backed by cardboard 11 by 12½ in , and covered by cellophane. These are for table use and handling rather than for hanging.

Title	Artist	Print No.	Press
The Artist's Room	Van Gogh	700	Art Extension Press
Behind the Plow	Kemp-Welch	34	Art Extension Press
Benighted for a Dry Camp	Remington	223	Dodge
Blue Window	Matisse	298	Art Extension Press
Bouquet	Matisse	343	Art Extension Press
The Bridge	Van Gogh	302	Art Extension Press
Chums	Jones	165	Art Extension Press
Fishing Boats	Van Gogh	303	Art Extension Press
Flowers	Redon	345	Art Extension Press
Girl with Fan	Gauguin	353	Art Extension Press
The Golden Age	Orthp	288	Art Extension Press
Going to Church, Moravia	Uprka	69	Art Extension Press
Going to Market	Troyon	29	Art Extension Press
Harvest	Parrish	234	Dodge
The Holiday	Potthast	119	Art Extension Press
Men Are Square	Beneker	172	Art Extension Press
Men on the Dock	Bellows	206	Art Extension Press
Mexican Child in Checkered Dress	Rivera	324	Art Extension Press
Mother and Child	Shulz	270	Art Extension Press
Northern Sunrise	Liljefors	96	Art Extension Press
On the Beach	Gauguin	307	Art Extension Press
On the Stairs	Zorn	80	Art Extension Press
The Peasant	Van Gogh	852	Art Extension Press
Polar Bears	Friese	290	Art Extension Press
The Primitive Sculptor	Couse	118	Art Extension Press
Russian Winter	Graber	54	Art Extension Press
The Sistine Madonna	Raphael	208	Art Extension Press
Spanish Peasants and Beggars	Zubiaurre	149	Art Extension Press
Spring Verdure	Fikentscher	3324	Art Extension Press
With Grandma	MacEwen	5	Art Extension Press
Venetian Waters	Tito	49	Art Extension Press

Title	Artist	Press	Size
Austrian Junior Red Cross Summer Cards	Cizek	Art Extension Press	5¾ by 3¾ in
Out of Doors (*series of 10 pictures*)	Cizek	Art Extension Press	5¾ by 3¾ in.
Blaues Pferd	Franz Mare	Art Extension Press	6 by 4 in.
Boote in Kanal	M Peckstein	Art Extension Press	6 by 4 in
Rote Pferde	Franz Mare	Art Extension Press	6 by 4 in.

The following is a list of names, sources, and approximate sizes of representative commercial posters.

Poster or Poster Series	Source	Approximate Size
Normandie	French Line	38 in by 22 in
Queen Mary	Cunard Line	29 in by 24 in.
S. S. Washington	U. S. Lines Steamship Co.	29 in by 24 in.
At Night	Pennsylvania R. R.	31 in by 21 in.
The Broadway of Commerce	Pennsylvania R R.	31 in. by 21 in
Horseshoe Curve	Pennsylvania R. R.	25 in by 18 in.
Indian Child, Route of the Empire Builder	The Great Northern Railway	22 in. by 16 in
Renascence (Burlington Zephyr)	Burlington R R.	17 in by 19 in
Streamliner "City of Denver"	Union Pacific R. R.	16 in by 24 in.
Good Morning series (8 posters)	Quaker Oats Company School Health Service	10 in by 13 in.
Playtime series (8 posters)	Quaker Oats Company School Health Service	10 in. by 13 in.
Pathways of the World a. *By Water* b. *By Land* c. *By Air*	Quaker Oats Company School Health Service	20 in. by 26 in.

PHONOGRAPH RECORDS[1]

Victor Record Number	Composition	Composer	Artist
1727 -B	*Abendlied*	Schumann	Albert Spaulding, accompanied by André Benoist
8456 -A	*Adventures in a Perambulator 3. The Hurdy-Gurdy*	John Alden Carpenter	Minneapolis Symphony Orchestra, conducted by Eugene Ormandy
8456 -B	*Adventures in a Perambulator 4 The Lake*		
25376-B	*Ah Still Suits Me* (from *Show Boat*)	Jerome Kern	Paul Robeson—Elisabeth Welch, duet with orchestra
35324-B	*A Hunt in the Black Forest*	Voelker	Victor Orchestra
1726 -B	*Allerseelen*	Strauss	Kirsten Flagstad, accompanied by Edwin McArthur
1558 -B	*All through the Night*	Old Welsh Air	Richard Crooks, accompanied by Jesse Crawford
8007 -B	*Ave Maria*	Kahn	Enrico Caruso—violin obliggato by Mischa Elman, accompanied by Percy B. Kahn
7252 -A	*Bolero*, Part 3	Ravel	Boston Symphony Orchestra, conducted by Serge Koussevitzky
1558 -A	*Beautiful Isle of Somewhere*	Pounds—Fearis	Richard Crooks, accompanied by Jesse Crawford
1503 -A	*Chanson Louis XIII et Pavanne*	Couperin—Kreisler	Fritz Kreisler, accompanied by Michael Rancheisen
19882-B	b *Clowns* (from *Midsummer Night's Dream*)	Mendelssohn	Victor Orchestra
25106-B	*Congo Lullaby*	Wimperis—Spoliansky	Paul Robeson
9009 -A	*Country Dance No.* 1 (from *Nell Gwyn*)	Edward German	St Louis Symphony Orchestra, conducted by Rudolph Ganz
22160-B	b. *Cradle Song*	Schubert	Alexander Schmidt
19796-A	*Dinah*	Lewis-Young-Akst	The Revelers

[1] This list comprises the records available to the first three groups For Junior Primary use, records are selected from the large collection belonging to the University elementary school.

PHONOGRAPH RECORDS —(*Continued*)

Victor Record Number	Composition	Composer	Artist
18216-A	a *Dorothy*	Old English Dance	Seymour Smith
19882-A	b *Duarfs*	Reinhold	Victor Orchestra
8007 -A	*Elégie—Mélodie*	Massenet	Enrico Caruso—violin obligato by Mischa Elman, accompanied by Percy B. Kahn
1337 -A	*España Rapsodie*, Part 1	Chabrier	Detroit Symphony Orchestra, conducted by Ossip Gabrilowitsch
1337 -B	Part 2		
36020-A	a *Ezekiel Saw de Wheel*		Hall Johnson Negro Choir
19882-B	a *Fairies* (*Scherzo*)	Schubert	Victor Orchestra
24775-A	*Festival March* (from *Tannhauser*)	Wagner	Victor Orchestra
18216-A	b *Gavotte* (from *Mignon*)	Ambroise Thomas	William H. Reitz
18754-B	a. *Gavotte in B—Flat*	Handel	Victor Orchestra
18754-B	b *Gigue*	Corelli	Victor Orchestra
19882-A	a *Gnomes*	Reinhold	Victor Orchestra
36020-B	a. *Good News*		Hall Johnson Negro Choir
7252 -B	*Gymnopédie*	Ravel	Boston Symphony Orchestra, conducted by Serge Koussevitzky
1193 -A	*Harmonious Blacksmith*	Handel	Wanda Landowska
6236 -A	*Hungarian Rhapsody, No.* 2	Liszt	Philadelphia Symphony Orchestra, conducted by Leopold Stokowski
22160-A	b. *Hush, My Babe*	Rousseau	Alexander Schmidt
35324-A	*In a Clock Store*	Orth	Victor Orchestra
20161-B	Instrumental Combinations		
	No. 6		
	a. *Waltzing Doll*	Poldini	
	b. *Canzonetta*	Mendelssohn	
	c. *Waltz*	Hummel	
	d. *Lead through Life a Pleasant Way*		
20161-A	Instrumental Combinations		
	No 5		
	a. *Serenade*	d'Ambrosio	
	b. *Valse brillante*	Chopin	
	c. *Nocturne in D Flat*	Chopin	

PHONOGRAPH RECORDS—(*Continued*)

Victor Record Number	Composition	Composer	Artist
4316 -B	b *I Thought That Love Had Been a Boy*	Byrd	The London Madrigal Group
36020-A	b. *Keep Yo' Hand on the Plow, Hold On*		Hall Johnson Negro Choir
25106-A	*The Killing Song*	Wimperis—Spoliansky	Paul Robeson
22162-B	a *The Knight of the Hobby Horse*	Schumann	Victor Orchestra
1503 -B	*La Précieuse*	Couperin—Kreisler	Fritz Kreisler, accompanied by Michael Rancheisen
6236 -B	*Largo* from "*New World Symphony*," *Symphony No 5 in E Minor*	Dvořák	Philadelphia Symphony Orchestra, conducted by Leopold Stokowski
35283-A	*Lights Out March*	McCoy	Victor Military Band
22160-A	b. *Little Sandman*	Brahms	Alexander Schmidt
22160-A	a. *Lullaby*	Brahms	Alexander Schmidt
22160-B	a *Lullaby*	Mozart	Alexander Schmidt
18754-A	*Marche romaine*	Gounod	Victor Orchestra
24776-A	a March from *Carnival*	Schumann	Victor Orchestra
	c March from *Iphigenia in Aulis*	Gluck	
24776-B	a. March from *Miniatures*	Reinhold	Victor Orchestra
	b. *March* (*Grotesque*)	Sinding	
	c. *March of the Priests* (from *Magic Flute*)	Mozart	
24775-B	a. March from *Love for Three Oranges*	Prakfieff	Victor Orchestra
	b. *March of Pilgrims* (from *Harold in Italy*)	Berlioz	
9148 -A	*March of the Toys* (from *Babes in Toyland*)	Victor Herbert	Victor Concert Orchestra, directed by Nathaniel Shilkret
18216-B	b. *Mazurka*	Chopin	William H. Reitz
1465 -B	*Midnight Bells* (from *The Opera Ball*)	Richard Heuberger	Fritz Kreisler, accompanied by Michael Rancheisen
7080 -B	*Midsummer Night's Dream—Scherzo* (after Act 1)	Mendelssohn	Philharmonic Symphony Orchestra of New York, conducted by Arturo Toscanini

PHONOGRAPH RECORDS —(*Continued*)

Victor Record Number	Composition	Composer	Artist
18216-B	a. *Moment musicale*	Schubert	William H Reitz
4316 -B	a *My Bonnie Lass She Smileth*	Morley	The London Madrigal Group
20068-A	*Nobody Knows de Trouble I've Seen*		Paul Robeson, accompanied by Lawrence Brown
4316 -A	b *Now Is the Month of Maying*	Morley	The London Madrigal Group
8662 -A	*Nutcracker Suite* a *Overture Miniature* b *Marche*	Tschaikowsky	Philadelphia Orchestra, conducted by Leopold Stokowski
8662 -B	*Nutcracker Suite* a *Danse de la fée dragée* b *Trepak*	Tschaikowsky	Philadelphia Orchestra, conducted by Leopold Stokowski
19796-B	*Oh, Miss Hannah*	Thekla Hollingsworth—Jessie L. Deppen	The Revelers
1465 -A	*The Old Refrain*	Viennese Popular Song	Fritz Kreisler, accompanied by Michael Rancheisen
25376-A	*Ol' Man River* (from *Show Boat*)	Oscar Hammerstein, 2nd—Jerome Kern	Paul Robeson, with orchestra
V-25-B	*Parade of the Wooden Soldiers*	Leon Gessel	International Concert Orchestra
9009 -B	*Pastoral Dance* No 2, *The Merrymakers' Dance*, No 3 (from *Nell Gwyn*)	Edward German	St. Louis Symphony Orchestra, conducted by Rudolph Ganz
36020-B	c *Religion Is a Fortune*		Hall Johnson Negro Choir
22162-A	b *The Rider's Story*	Schumann	Victor Orchestra
9163 -B	*Rheingold*, Prelude	Wagner	Symphony Orchestra, conducted by Albert Coates
20399-A	*Rhythms for Children* (4 parts)		Victor Orchestra
20399-B	*Rhythms for Children* (4 parts)		Victor Orchestra
8703 -A	*Scheherazade*, 4th Movement—*Festival at Bagdad*	Rimsky-Korsakov	Philadelphia Orchestra, conducted by Leopold Stokowski
8703 -B	*Scheherazade—Symphonic Suite*, 4th Movement	Rimsky-Korsakov	Philadelphia Orchestra, conducted by Leopold Stokowski

PHONOGRAPH RECORDS.—(*Continued*)

Victor Record Number	Composition	Composer	Artist
18754-B	c *Second Gavotte*	Sapellnikoff	Victor Orchestra
9148 -B	Selections from *Babes in Toyland* *In the Toymaker's Workshop; Never Mind Bo-Peep; Go to Sleep, Slumber Deep, Toyland; I Can't Do That Sum*	MacDonough—Herbert	Victor Light Opera Company, with orchestra, conducted by Nathaniel Shilkret
24776-A	b *Soldiers' Song* (from *Miniatures*)	Reinhold	Victor Orchestra
22162-B	b *Solitary Flowers*	Schumann	Victor Orchestra
11160-A	*Song of the Nightingale—Chinese March*, Part 1	Stravinsky	London Symphony Orchestra conducted by Albert Coates
36020-B	b *Standin' in de Need of Prayer*		Hall Johnson Negro Choir
4316 -A	a *Summer Is Icumen In*	Traditional	The London Madrigal Group
22160-B	c *Sweet and Low*	Barnby	Alexander Schmidt
20068-B	*Swing Low, Sweet Chariot*		Paul Robeson, accompanied by Lawrence Brown
36020-A	b. *Swing Low, Sweet Chariot*		Hall Johnson Negro Choir
6430 -A	*Symphony No. 5 in E Minor, Andante Cantabile*, 2d Movement—Part 1	Tschaikowsky	Philadelphia Orchestra, conducted by Leopold Stokowski
6430 -B	*Symphony No. 5 in E Minor, Andante Cantabile*, 2d Movement—Part 2	Tschaikowsky	Philadelphia Orchestra, conducted by Leopold Stokowski
7080 -A	*Symphony No. 4 in D Major*, Part 7, 4th Movement, *Finale—Vivace*	Haydn	Philharmonic Symphony Orchestra of New York, conducted by Arturo Toscanini
1727 -A	*Traumerei*	Schumann	Albert Spaulding—André Benoist
11193-B	*Turkish March*	Mozart	Wanda Landowska
1726 -A	*Die Walkuire—Ho-Yo-To-Ho*, Act 2	Wagner	Kirsten Flagstad, with orchestra, conducted by Hans Lange

PHONOGRAPH RECORDS —(*Continued*)

Victor Record Number	Composition	Composer	Artist
9163 -A	*Die Walkure—Ride of the Valkyries*, Act 3		Symphony Orchestra, conducted by Albert Coates
19869-B	*The Warbler's Serenade*	Pryor	Arthur Pryor's Band
35283-B	*Washington Post March*	Sousa	Victor Military Band
19869-A	*The Whistler and His Dog*	Pryor	Arthur Pryor's Band
22162-A	*The Wild Horseman*	Schumann	Victor Orchestra
DECCA RECORD			
20170-A	*Pastorale—Andante*	Bach	Gunther Ramin, Organ of St Thomaskirche, Leipzig
20170-B	*Pastorale—Allegro*	Bach	Günther Ramin, Organ of St Thomaskirche, Leipzig

Children's Books in the Preschool Laboratories

Below are listed books used by the children in the preschool laboratories. Following the titles are indicated the groups in which these books may be found First Group, for two-year-olds, is indicated as I, Second Group, for three-year-olds, as II, Third Group, for four-year-olds, as III, and Junior Primary, for five-year-olds, as J.P.

While in general it is implied that the books are judged to be appropriate for the age of the children belonging to the given group, it must be remembered that there is always a need for providing for wide individual differences within a group. Moreover, the same book may be used in extremely different ways in two groups, *i.e.*, the text may be used in one group, the pictures in another. While too much duplication from group to group is to be avoided, it is held in mind not only that some books are appropriate for several years but also that a child enjoys old friends in books as well as he does under other circumstances.

BOOKS

	Group
ABC Book, by C. B. Falls, Garden City, N. Y.: Doubleday, Page, 1927.	J.P.
About Things, by Mary Windsor, illustrated by Charlotte Stone, New York: Grosset & Dunlap, 1935.	III
The Adventures of Peter and Lotta, a story told and illustrated by Elsa Beskow, New York: Harper [no date].	J.P.
The Aesop for Children with Pictures, by Milo Winter, Chicago: Rand, McNally, 1919.	J.P.
The Airplane Book—A Photographic Picture Book with a Story, by William C. Pryor and Helen S. Pryor, New York: Harcourt, Brace, 1935	J.P.

An Airplane Ride, by Helen S. Read, illustrated by Eleanor Lee. Social Science Reader. New York Scribner, 1928.	I, II, III, J.P.
Airplanes. Picture Scripts. New York Grosset & Dunlap, 1936.	II, III
All Around the Clock, by Lena Towsley, New York: Farrar & Rinehart, 1934.	III, J.P.
Angus and the Cat, by Marjorie Flack, Garden City, N. Y.· Doubleday, Doran, 1935.	II, III
Angus and the Ducks, by Marjorie Flack, Garden City, N. Y.: Doubleday, Doran, 1930.	II, III
Animals and Their Babies, by Jeanette Smith, Unit Study Books, No 208, American Education Press Co., 1934.	J.P.
Animal Friends Story Book, by Watty Piper, illustrated by P J. Bayzand, Clara M Burd, Hugh Spencer, New York: Platt & Munk, 1935.	II, III
Animals I Like, by Louv'a, illustrated by H. Guertik, New York: Artists' & Writers' Guild, 1935.	I
Another New Year with Bobbie and Donnie, by Esther Brann, New York. Macmillan, 1936.	II, III
A Apple Pie, by Kate Greenaway, London: Warne [no date].	J.P.
Around the World at Play, by Mathilde Ritter, Chicago· Albert Whitman, 1932.	J.P.
Ask Mr. Bear, by Marjorie Flack, New York: Macmillan, 1932.	II, III, J.P.
At the Zoo, by Arthur O. Cooke, pictures by Wimfred Austen. New York Nelson [no date].	J.P.
Aunt Brown's Birthday, a story told and illustrated by Elsa Beskow, New York: Harper, 1930.	J.P.
Aunt Green, Aunt Brown and Aunt Lavendar, a story told and illustrated by Elsa Beskow, New York: Harper, 1928.	J.P.
Babies, by Alice Higgins, illustrated by Maud Tousey Fangel, Racine, Wis.: Whitman, 1933.	I
Baby Animals, by Diana Thorne, New York: Saalfield, 1932.	I
Barn-yard Babies in the Alphabet, by Ruth Townsend and Erving Tolloway, J. C. Allen, Edward McGill, Chicago: Merrill, 1934.	I
Betty and Dolly, by Ruth Alexander Nichols, Chicago: Merrill, 1935.	I
Billy, by Ruth Alexander Nichols, New York: Macmillan, 1934.	II, III
Billy's Letter, by Helen S. Read, illustrated by Eleanor Lee, New York: Scribner, 1929.	II, III
Bird and Animal Paintings, by R. Bruce Horsfall, with text by Carra E. Horsfall, Washington, D.C.: Nature Magazine, 1928.	J.P.

Bird Guide—Land Birds East of the Rockies, by Chester A. Reed, Garden City, N. Y.: Doubleday, Page, 1926.	II, III
Birds of America, by The University Society, Inc., New York: Garden City Publishing Co., 1936.	II, III
Black Sambo and the Twins, by Helen Bannerman, New York: Stokes, 1936.	III, J P.
Blimps & Such, by Dorothy Walter Baruch, with pictures by Elizabeth Tyler Wolcott, New York: Harper, 1932.	III
Blue Barns, by Helen Sewell, New York: Macmillan, 1933.	III
'Board the Airliner, by John J. Floherty, Garden City, N. Y.: Doubleday, Doran, 1934.	III
Bobbie and Donnie Were Twins, by Esther Brann, New York: Macmillan, 1933.	II, III
The Book of Birds, National Geographic Society, Washington, D. C.: Judd & Detweiler, 1927.	II, III, J.P.
The Book of Dogs, by James G. Lawson, Chicago: Rand, McNally, 1934.	
The Book of Dogs, National Geographic Society, Washington, D. C.: Judd & Detweiler, 1927.	I, II, III, J.P.
The Book of Fishes, National Geographic Society, Washington, D. C.. 1924.	J.P
Boats, Picture Scripts. New York: Grosset & Dunlap, 1936.	II, III
Bouncing Betsy, by Dorothy P. Lathrop, New York: Macmillan, 1936.	III
Bridges, by Henry H. Bormann, New York. Macmillan, 1934.	III
Buttons, pictures by George and Doris Hauman, New York: Macmillan, 1936.	
R. Caldecott's Picture Book, New York. Warne [no date].	J.P.
Chicken World, by E. Boyd Smith, New York: Putnam, 1910.	I, J.P.
Children of the Northlights, by Ingri and Edgar Parin d' Aulaire, New York: Viking, 1935.	III
A Child's Book of Stories, selected and arranged by Penrhyn W. Coussens, with pictures by Jessie Willcox Smith, New York: Duffield, 1926.	J.P.
A Child's Garden of Verse, by Robert Louis Stevenson, illustrated by Jessie Willcox Smith, New York. Scribner, 1905.	II, III, J.P.
Chimney Corner Poems, by Veronica S. Hutchinson, New York: Minton, Balch, 1929.	III
The Christ Child, by Maud and Miska Petersham, Garden City, N. Y.: Doubleday, Doran, 1931.	II, III, J.P.
Christopher, by Marjorie Flack, New York: Scribner, 1935.	II, III

Cinder, by Romney Gay, New York: Grosset & Dunlap, 1934. II, III

Clean Peter and the Children of Grubbylea, by Otillia Adelborg, New York: Longmans, Green [no date]. J.P.

The Deliverymen, by Charlotte Kuh, New York: Macmillan, 1934. I, II, III, J.P.

Diggers and Builders, by Henry Lent, New York: Macmillan, 1933. III

The Dirigible Book—A Photographic Picture-book with a Story, by William C. Pryor and Helen S. Pryor, New York: Harcourt, Brace, 1936. J.P.

Elf Children of the Woods—A Picture Book, by Elsa Beskow, New York: Harper, 1932. J P.

The Engineer, by Charlotte Kuh, New York: Macmillan, 1934. I, J.P.

An Engine's Story, by Helen S. Read, New York. Scribner, 1928. I, II, III, J.P.

English Nursery Rhymes, by L. Edna Walter, Lucy E. Broadwood, and Dorothy M. Wheeler, London: Black, 1916. J.P.

Ezra the Elephant, by Marjorie Barrows, New York: Grosset & Dunlap, 1934. II, III

Fairies and Chimneys, by Rose Fyleman, Garden City, N. Y.: Doubleday, Doran, 1920. J.P.

The Farm Book, by C. Boyd Smith, Boston: Houghton Mifflin, 1910. J.P.

The Farmer at His Work, by John Y. Beatty, New York: Saalfield, 1933. I

The Farmer in the Dell, by Berta and Elmer Hader, New York: Macmillan, 1931. III, J.P.

The Fire Engine Book—A Photographic Picture-book with a Story, by William C. Pryor, New York: Harcourt, Brace, 1934. J.P.

The Fireman, by Charlotte Kuh, New York: Macmillan, 1929. J.P.

Firemen, by Eleanor M. Johnson, Columbus, Ohio: American Education Press, Inc., 1934.

Fire Fighters, by John J. Floherty, Garden City, N. Y.: Doubleday, Doran, 1934. III

The First Picture Book, by Mary Steichen Martin, New York: Harcourt, Brace, 1930. I

Fun at Happy Acres, by Ruth C. Barlow, New York: Crowell, 1935. III

Fun with Michael, by Dorothy and Marguerite Bryan, Garden City, N. Y.: Doubleday, Doran, 1934. III

The Funny Noise, by Romney Gay, New York: Grosset & Dunlap, 1935. II, III

Garden of Betty and Booth, by Nura Woodson Ulreich, New York: Morrow, 1935. III

Get-a-way and Hary Janos, by Maud and Miska Petersham, New York: Viking, 1933. III

Giant Alto, by William Péne DuBois, New York: Viking, 1936. III

The Glass Book—A Photograph Picture-book with a Story, by William C. Pryor and Helen S. Pryor, New York: Harcourt, Brace, 1935. J.P.

The Golden Flute, selected by Alice Hubbard and Adeline Babbitt, New York: Day, 1932. II, III

The Golden Goose Book, illustrations by L. Leslie Brooke, London: Warne [no date]. J.P.

Good Companions—Helpers, by Rose Lees Hardy and Geneva J. Hecox, assisted by Clara Hickman, New York: Nelson, 1931. J.P.

Grandfather's Farm, by Helen S. Read, New York: Scribner, 1928. II, III, J.P.

Handbook of Nature Study, by Anna Botsford Comstock, Ithaca, N. Y.: Comstock, 1931. I, II, III, J.P.

The Happy Hen, by Helen and Alf Evers, New York: Farrar & Rinehart, 1933. J.P.

Happy Hours, by Elizabeth Daniel, Chicago: Rand, McNally, 1934. I

Here and Now Story Book, by Lucy Sprague Mitchell, New York: Dutton, 1921. I, II, III

Holiday Hill, by Edith M. Patch, New York Macmillan, 1935. III

Horses of the World, by Major General William Harding Carter, with paintings by Edward Herbert Miner, Washington, D. C.: National Geographic Society, 1923. J.P.

Humbo the Hippo and Little-Boy-Bumbo, story and drawings by Erick Berry, New York: Harper, 1932. J.P.

I Like Animals, by Dorothy Walter Baruch, New York: Harper, 1933. II, III

I Like Machinery, by Dorothy Walter Baruch, New York: Harper, 1933. II, III

In the Mouse's House, arranged by Lois Donaldson, Chicago: Whitman, 1936. III, J.P.

Interesting Neighbors, by Oliver P. Jenkins, Philadelphia: Blakiston Son, 1922. I

Jimmy the Groceryman, by Jane Miller, Cambridge, Mass.: Riverside, 1934.

Jinny The Story of a Filly, by Bert Clark Thayer, New York. Farrar & Rinehart, 1934 III

Jip and the Firemen, by Helen S Read, New York· Scribner, 1929 II, III

Joan and Jack, by Betty Ettinger, New York. Grosset & Dunlap, 1935. II, III

Johnny Crow's Garden, by L. Leslie Brooke, New York: Warne, 1935. I

Johnny Crow's New Garden, by L. Leslie Brooke, New York Warne, 1935. I, J P.

Johnny Crow's Party, by Leslie Brooke, London: Warne [no date]. J.P.

Johnny Goes to the Fair, by Lois Lenski, New York: Minton, Balch, 1932. J.P.

Johnny Penguin, by Dorothy and Marguerite Bryan, Garden City, N. Y Doubleday, Doran, 1931. J.P.

Karl's Wooden Horse, pictures by Annie Bergmann and story by Lois Donaldson, Chicago: Whitman, 1933. Printed in Germany. I, II, III

Keeping Our City Safe and Clean, by Eleanor M. Johnson. United Study Books, No. 104. New York: American Education Press, 1934. J.P.

Library, by Eleanor M. Johnson, Educational Printing House, Inc., 1934. J.P.

The Little Auto, by Lois Lenski, New York: Oxford, 1934. I, II, III

The Little Book, by Marjorie Hardy, Chicago: Wheeler, 1928. I

Little Duck, story by Marjorie Barrows and sketches by Marie Honoré Myers, New York: Grosset & Dunlap, 1935. II, III

The Little Engine That Could, retold by Watty Piper from *The Pony Engine*, by Mabel C. Bragg, with pictures by Lois Lenski, New York: Platt & Munk, 1930. J.P.

The Little Family, by Lois Lenski, New York: Doubleday, Doran, 1935. I, II, III

The Little Gardeners, from the German of Elizabeth Morgenstern. Retold by Louise F. Enckıng with pictures by Marigard Bantzer. Chicago: Whitman, 1933. Printed in Bavaria. II, III

The Little Red Chair, by Marian Walker, New York: Macmillan, 1932. I, II, III

The Little Wooden Farmer, by Alice Dalgliesh, New York: Macmillan, 1935. II

Mary and the Policeman, by Helen S. Read, New York: Scribner, 1929. II, III

Michael Who Missed His Train, by Dorothy and Marguerite Bryan, Garden City, N. Y.: Doubleday, Doran, 1933. III, J.P.

Millions of Cats, by Wanda Gág, New York: Coward-McCann, 1928. II, III

Ming and Mehitable, by Helen Sewell, New York. Macmillan, 1936.

Mittens, by Clare Turlay Newberry, New York: Harper, 1936. III

Mitty and Mr. Syrup, story by Ruth Langland Holberg and pictures by Richard A. Holberg, Garden City, N. Y.. Doubleday, Doran, 1935. III

Mitty on Mr. Syrup's Farm, by Ruth and Richard Holberg, Garden City, N. Y.: Doubleday, Doran, 1936. J.P.

More Poems for Peter, by Lysbeth Boyd Borie, Philadelphia: Lippincott, 1931. I

Mother Goose or The Old Nursery Rhymes, illustrated by Kate Greenaway, London: Warne [no date]. J P

Mr. Brown's Grocery Store, by Helen S. Read, New York: Scribner, 1929. II, III

My Blue Book: Adventures for Young Children, by Helen S. Read, New York: Scribner, 1931. J.P.

My Pretty Pets, picture book, New York: Gabriel, 1928. I

Nancy, by Ruth Alexander Nicholas, New York: Macmillan, 1933. II, III

Nicodemus and His Gran'pappy, by Inez Hogan, New York: Dutton, 1936. J.P.

Nicodemus and the Little Black Pig, by Inez Hogan, New York: Dutton, 1936. J.P.

Noah and Rabbit, by Herbert McKay, New York: Dutton, 1932. J P.

Nonsense Books, by Edward Lear, Boston: Little, Brown, 1924. J P.

Now Open the Box, by Dorothy Kunhardt, New York: Harcourt, Brace, 1934. II, III

Odie Seeks a Friend, by Julius King, New York: Coward-McCann, 1934. II, III

Ola and Blakken, by Ingri and Edgar Parin d' Aulaire, Garden City, N. Y.: Doubleday, Doran, 1932. III, J.P.

Old Old Tales Retold, illustrated by Frederick Richardson, Chicago. Volland, 1923. II, III

On Our Farm, by John Y. Beatty, Akron, O.: Saalfield, 1932. II, III, J.P.

One Hundred Best Poems, by Marjorie Barrows, Racine, Wis.: Whitman, 1930. I, J.P.

Our Houses, by Eleanor M. Johnson, Columbus, Ohio: American Education Press, 1934. J.P.

Otto at Sea, by William Péne duBois, New York: Viking, 1936.

The Painted Pig, by Elizabeth Morrow, New York: Knopf, 1930. J.P.

The Pangandrum Picture Book, by Randolph Caldecott, London: Warne [no date]. J.P.

The Paper Book A Photographic Picture-Book with a Story, by William C. Pryor and Helen S. Pryor, New York Harcourt, Brace, 1936. J.P.

Patsy Ann, by Mona Reed King, Chicago· Rand, McNally, 1935. I

Peggy and Peter, by Lena Towsley, New York: Farrar & Rinehart, 1931. I, II, III

Peggy and the Pony, by Helen Sewell, New York. Oxford, 1936 III

The Pelican Chorus, by Edward Lear, New York: Warne [no date]. J P.

Pelle's New Suit, picture book by Elsa Beskow, translated by Marion Letcher Woodburn, Stavanger, Norway: Dreyers Grafiske Anstalt [no date]. III, J P.

Pepito the Colt, by Ruth Orton and Diana Thorne, Boston: Houghton Mifflin, 1933. III

The Peter Patter Book, by Leroy F. Jackson, Chicago: Rand, McNally, 1918. J.P.

Peter's Adventure, by Romney Gay, Racine, Wis.: Whitman, 1936. II, III

Picture Book· Number One, by R. Caldecott, London, Warne [no date]. J.P.

The Picture Book of Animals, by Isabel Ely Lord, New York: Macmillan, 1931. I, J.P.

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